

**E-DISCOVERY AS QUANTUM LAW:
CLASH OF CULTURES—WHAT THE FUTURE PORTENDS**

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I. INTRODUCTION

[1] Early in the twentieth century, the phenomenon that is the “quantum”¹ stormed the fortress of classical physics, causing Albert Einstein, one of science's greatest thinkers, to opine, “[i]t was as if the ground had been pulled out from under one, with no firm foundation to be seen anywhere, upon which one could have built.”² The theoretical laws associated with looking at reality on the quantum level violently collided with those related to looking at the same reality on the macro level. The application of quantum theory to the mathematically pure and proven classical laws of physics introduced a cultural clash in the world of

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¹ “Quantum” is a term introduced by physicist Max Planck in 1900 to describe individual packets of energy as he worked on an equation which represented energy loss in his famous blackbody radiation experiments. While physics historians spend much effort on the precise etiology of the term as used by physicists, it is widely agreed among them that Planck is best tagged as the father of the quantum. See David Thyberg, *Max Planck's Quantum Theory*, EHOW, http://www.ehow.com/about_5439341_max-plancks-quantum-theory.html (last visited Feb. 4, 2013).

² MANJIT KUMAR, *QUANTUM: EINSTEIN, BOHR AND THE GREAT DEBATE ABOUT THE NATURE OF REALITY 1* (Icon Books Ltd. 2009) (2008).

theoretical physics, which caused many physicists to doubt their very sanity. This Article argues that developments in the law related to the phenomenon of “e-discovery”³ have been no less shattering to those practitioners in the classical practice of law than the introduction of quantum theory in physics. The introduction of “electronically stored information” or “ESI” using the procedural rules designed to govern the classical practice of law created an identifiable shift in jurisprudence related to e-discovery.⁴ Indeed, the introduction of this category of discoverable information caused a cultural explosion within a segment of the legal profession not seen in any other profession since those great thinkers of physics nearly a century ago.

[2] This Article provides an overview of the clash of cultures extant in the practice of e-discovery related law today along with an entertaining comparative perspective from the viewpoint of a similar clash that occurred in the physical sciences. The author hopes that by understanding more fully some of the causes of practitioner angst in managing e-discovery obligations, along with a glimpse of what trends can be expected in the future, this phenomenon can be better confronted and managed.

II. DISCUSSION

[3] Changes in the law are most often driven by reasoned debate over a period of some time and carefully, if not cautiously, embraced by the

³ The term “e-discovery” is shorthand for “electronic discovery.” For a phenomenon not far out of its infancy, it is not unusual to see a variety of terms come and go. “EDD” was an early favorite of many, standing for “electronic data discovery.” Both terms broadly refer to all of the elements of discovery which attend electronically stored information.

⁴ The Federal Rules of Civil Procedure (“FRCP”) were amended in 2006 to introduce this new category, “electronically stored information,” as material to be preserved as part of a party’s discovery obligations. See K&L Gates, *E-Discovery Amendments to the Federal Rules of Civil Procedure go into Effect Today*, ELEC. DISCOVERY L. (Dec. 1, 2006, 2:27 PM), <http://www.ediscoverylaw.com/2006/12/articles/news-updates/ediscovery-amendments-to-the-federal-rules-of-civil-procedure-go-into-effect-today/>.

bench. Drama is by and large a stranger to the doorstep of the law, except for those moments that attend some social or economic issue with political import, and for the most part is incompatible with the plodding evolution of jurisprudence. With complete awareness of and respect for the reality comprising the beautifully crafted portrait of the law, which was accomplished over hundreds of years by the many practitioners and judges using the most considerate strokes of the brush, this Article introduces a moment of drama.

[4] Cultural explosions come in many colors and stripes. In Europe, the French Revolution comes to mind. In America, the emergence of an anti-government, anti-authority culture reflected in unprecedented massive national demonstrations across the landscape during the Vietnam War comes to mind. Few would argue that these two examples do not reflect the clash of cultures between two different worlds of values and beliefs.

[5] In the classical practice of law, one would expect to find a more subtle representation of such a clash aside from the guillotine of the French Revolution or the Kent State tragedy that captured the culture clash of noble protectors of freedom and dirty hippies protesting without a permit. While a single image may not express the violence that often accompanies socio-cultural explosions within a nation's history, its representation of the clash of worldviews can be no less dramatic. The graphic presented as part of the article "Sanctions for E-Discovery Violations: By the Numbers" published in the *Duke Law Journal* in 2010 is one such representation.⁵ This graphic, reproduced in the Appendix, shows the increase in the number of cases in which e-discovery related sanctions were sought.⁶ Like the recording instruments of the first experiments in the early days of quantum physics, the explosion documented by this graphic, although not representative of physical

⁵ Dan H. Willoughby, Jr. et al., *Sanctions for E-Discovery Violations: By the Numbers*, 60 DUKE L. J. 789, 795 fig.1 (2010).

⁶ See *infra* Appendix: Figure 1.

violence, paints a portrait of an earth-shattering cultural clash within the realms of classical law and quantum law.

III. A CLASH OF CULTURES

[6] The classical culture and practice of law are best captured in the days before the FRCP and the 2006 Amendments brought ESI to life. As with isolated early experimental results in quantum physics, there are instances where courts acted on discovery abuses relating to ESI before those now hallowed amendments found their way onto the pages of the FRCP.⁷ Just like the early theories and experiments in quantum physics, these decisions were mere drops of rain on a landscape that was soon to experience the torrent of a flash flood running beyond the banks of a reasoned river of e-discovery related jurisprudence.

[7] In “classical law,” discovery was something most often managed down the road after litigators were convinced that a relatively swift resolution of the merits by settlement would not take place short of moving on to more serious stages of the litigation life cycle. E-discovery was often viewed as one of the steps toward the more deliberate moments of litigation, carrying with it a classical gravity of a sort. While the FRCP and many state rules before the advent of ESI spoke to the duty of evidence preservation, one is hard pressed to identify more than a handful of litigation hold letters or memoranda from an attorney to a client

⁷ Compare *Ill. Tool Works, Inc. v. Metro Mark Prods., Ltd.*, 43 F. Supp. 2d 951, 953, 960-61 (N.D. Ill. 1999) (holding that sanctions against defendants in misappropriation of trade secrets action were warranted for violation of discovery order by tampering with computer that had been ordered to be produced), with *Koken v. Black & Veatch Constr., Inc.*, 426 F.3d 39, 53 (1st Cir. 2005) (finding that the district court did not abuse its discretion by refusing to impose monetary sanctions for party’s alleged failure to timely provide documents, particularly electronic documents, during discovery).

amongst the tens of thousands of cases litigated before the year 2000.⁸ As the *Duke Law Journal* graphic indicates, a culture clash surrounding discovery motions practice emerges with ESI and the development of jurisprudence related to discovery preservation and spoliation, the phenomenon of “quantum law.”⁹ The graphic, however, is telling in that with the introduction of ESI into the FRCP, there was a brilliant clash of cultures between classical law and quantum law. History will determine whether quantum law finds its etiology in the bench, the bar, or a combination of the two, but something continues to drive it in ample measure in the present.

[8] Indeed, while conducting e-discovery CLEs, references to the *Duke Law Journal* graphic are accompanied with a simple question: “Why?”¹⁰ Why, on this graphic of discovery motions practice is over a quarter of a century of relatively flat, nearly negligible bars followed by an explosion of sanctions in the last six to eight years? If the FRCP were amended, for example, to change the number of days allowed for mailing a response to discovery, or for the filing of an answer to a complaint, would we witness similar widespread non-compliance by attorneys?

[9] The clash of cultures related to the phenomenon of quantum law has not escaped notice. As with the introduction of quantum theory in physics, jurisprudence related to e-discovery has slowly begun to spawn

⁸ Litigation hold letters, also known as legal holds, are instruments, most often an email or correspondence, issued from counsel and/or company management to individuals identified as likely custodians of potentially relevant ESI (as well as paper documents) in an action, or an anticipated action. Each custodian will have numerous potential data locations that must be preserved and the litigation hold speaks to this in general and specific terms.

⁹ See Willoughby et al., *supra* note 5.

¹⁰ The author is the instructor of *The E-Discovery Challenge: Practice and Ethics*, Virginia Mandatory Continuing Legal Education, Course No. JAA0017, in which he discusses this graphic.

incredulous observations. This incredulity of the present clash is well captured in some of the comments from its historical counterpart in physics. “The more I think about the physical portion of the Schrödinger theory, the more repulsive I find it,” Werner Heisenberg fulminated.¹¹ Indeed, Schrödinger seemed to agree with him, exclaiming at one point that, “[i]f all this damned quantum jumping were really here to stay, I should be sorry I ever got involved with quantum theory.”¹² Today, running on a course parallel to those esteemed scientists’ remarks, one can almost sense the same level of abject disbelief in the words of numerous court decisions resulting from the clash of cultures between classical law and quantum law. One is particularly poignant:

Once again, this Court is required to rule on an e-discovery issue that could have been avoided had the parties had the good sense to “meet and confer,” “cooperate” and generally make every effort to “communicate” as to the form in which ESI would be produced. The quoted words are found in opinion after opinion and yet lawyers fail to take the necessary steps to fulfill their obligations to each other and to the court.¹³

[10] Certain words in these decisions seem to reflect judicial rumination on the quantum law phenomenon and point to a biting and unflattering analysis. “[L]awyers—even highly respected private lawyers . . . need to make greater efforts to comply with the expectations that courts now demand of counsel with respect to expensive and time-consuming

¹¹ KUMAR, *supra* note 2, at 155.

¹² *Id.*

¹³ Nat’l Day Laborer Org. Network v. U.S. Immigration & Customs Enforcement Agency, No. 10 Civ. 3488(SAS), at 25 (S.D.N.Y. Feb. 7, 2011), *available at* <http://cjrjustice.org/files/Doc%2041%202-7-11%20Opinion%20and%20Order%20re%20Form%20of%20Production.pdf>, *withdrawn*, 2011 WL 381625 (June 17, 2011).

document production. Lawyers are all too ready to point the finger at the courts and the Rules”¹⁴ In the title of his article, “‘*Do I Really Have To Do That?*’ Rule 26(a)(1) Disclosures and Electronic Information,” United States Magistrate Judge David J. Waxse succinctly captured the attitude of practitioners of classical law who continue to be buffeted by the requirements and impact of ESI.¹⁵ So widespread is this crash of clashing of cultures that Judge Waxse observed that such disbelief “echo[ed] around the litigation world.”¹⁶ Practitioners are also taking notice.

[11] Ralph Losey, an attorney who phased out his general trial practice to fully engage in the e-discovery world, “quickly noticed something [he] had not seen before in any other field of law. . . . case law is dominated by sanctions cases involving spoliation of evidence. . . . [and] attorneys are often directly implicated in this spoliation.”¹⁷ Losey expressed early wonderment at the world of quantum law, “wonder[ing] if [he] had stepped into a crazy zone of the law.”¹⁸ Brad Harris and Craig Ball—the former an expert practitioner and the latter an attorney and one of the foremost national experts on e-discovery law—suggest that “[t]he growing urgency of this matter . . . touched off a flurry of rulings in the area of legal holds in 2010, with several major court decisions redrawing the map in what had been virtual terra incognita.”¹⁹

¹⁴ *Id.*

¹⁵ David J. Waxse, “*Do I Really Have To Do That?*” *Rule 26(a)(1) Disclosures and Electronic Information*, 10 RICH. J.L. & TECH. 50 (2004), at <http://law.richmond.edu/jolt/v10i5/article50.pdf>.

¹⁶ *Id.* at ¶ 8.

¹⁷ Ralph Losey, *Ethics of Electronic Discovery - Part One*, E-DISCOVERY TEAM (Mar. 4, 2012, 9:18 PM), <http://e-discoveryteam.com/2012/03/04/ethics-of-electronic-discovery-part-one/>.

¹⁸ *Id.*

¹⁹ Brad Harris & Craig Ball, *What's There to Hold On To? An Enlightened Approach to Data Preservation in the Era of the Legal Hold*, CORP. COUNS., Feb. 14, 2011.

[12] In the laboratory of quantum law, the results of the “experiments” in the form of an exploding ESI-related motions practice and resulting sanctions were often so bizarre that practitioners of classical law simply refused to accept what was before them. Up seems to become down and far away now seems too close to bear. The world of classical law is askew as if stretching to the forces of some unseen black hole.²⁰ Simple basic tenets of law steeped in tradition are becoming seemingly meaningless in the world of quantum law. The bedrock principles of *stare decisis* and the influence of nonbinding precedence hold no sway in this clash of cultures. Practitioners now hear that an e-discovery spoliation decision made by a judge in New York's Southern District might bear on how they should manage discovery in their district in the Fourth or Ninth Circuit.²¹ Respected counsel from respected firms, albeit of the newly emerging practitioner class of quantum law, write things about a single decision by a single judge "promis[ing] to significantly affect the way e-discovery is practiced and litigated in the federal courts."²² Classical law practitioners' reactions are deep seated and visceral.

²⁰ "Black holes" are phenomena known in physics which describe an area of space in which the gravity is so great that all matter around it literally swirls down it into nothingness. Not even light can escape. *See generally* STEPHEN W. HAWKING, A BRIEF HISTORY OF TIME: FROM THE BIG BANG TO BLACK HOLES 81-82 (1988) (discussing this marvel of science).

²¹ *See, e.g.*, Philip Yannella & Abraham Rein, *Zubulake Revisited: Pension Committee Decision Offers Spoliation Guidance*, DECHERT LLP, http://www.dechert.com/files/Publication/aa5656f7-126b-404d-8f1d-d4905fe60d7f/Presentation/PublicationAttachment/04cbec1f-b3b5-435a-8085-dd7bee3d5ee7/2-10_PROD-LIAB_Yannella_Rein_Zubulake_Revisited.pdf (last visited Feb. 4, 2013) (discussing Pension Comm. of the Univ. of Montreal Pension Plan v. Banc of Am. Sec., L.L.C., 685 F. Supp. 2d 456, 464-69 (S.D.N.Y. 2010), *abrogated by* *Chin v. Port Auth. of N.Y. & N.J.*, 685 F.3d 135 (2d Cir. 2012)).

²² Yannella & Rein, *supra* note 21.

[13] I recall a dear friend a well-seasoned litigator summoning me to a lunch one day shortly after the release of the FRCP 2006 Amendments and the resulting written and reported smatterings of happenings from the world of quantum law began to appear.²³ My friend inquired: “Do you believe this is something here to stay or just the latest judicial fad?” I opined that perhaps what we were seeing belonged to the former rather than the latter category, which was answered by a look of despondency. With a panic stricken countenance in stark dissonance to the once confident and charismatic litigator I had known for many years, my friend exclaimed: “I don't care what a federal judge tells me to do about this so-called e-discovery. I am simply not going to do it. They cannot make my client incur all of these ridiculous costs!” This was a response that well reflects the anguish that the simple term “ESI” introduced to the world of classical law. Many classical practitioners felt, for the first time in perhaps storied careers, that the legal landscape over which they had exercised such command and control assumed a foreign and threatening shape. Their refusal to acknowledge and accept what was fast becoming a new force in litigation to be reckoned with, I suggest, contributed to the phenomenon so well captured by the *Duke Law Journal* graphic. It certainly did not escape notice of the editors of the Federal Judicial Center, who noted in the preface to *Managing Discovery of Electronic Information: A Pocket Guide for Judges* that:

²³ See *Victor Stanley, Inc. v. Creative Pipe, Inc.*, 250 F.R.D. 251, 253 (D. Md. 2008); *In re Subpoena Duces Tecum to AOL, L.L.C.*, 550 F. Supp. 2d 606, 608-09 (E.D. Va. 2008); *Nucor Corp. v. Bell*, 251 F.R.D. 191, 192 (D.S.C. 2008); *Qualcomm Inc. v. Broadcom Corp.*, No. 05cv1958-B (BLM), 2008 WL 66932, at *2-3 (S.D. Cal. Jan. 7, 2008); *PSEG Power N.Y., Inc. v. Alberici Constructors, Inc.*, No. 1:05-CV-657 (DNH/RFT), 2007 WL 2687670, at *1 (N.D.N.Y. Sept. 7, 2007); *Modern Eng'g, Inc. v. Peterson*, No. 07-CV-1055, 2007 WL 2680563, at *2 (C.D. Ill. July 16, 2007); *Strauss v. Credit Lyonnais, S.A.*, 242 F.R.D. 199, 205 (E.D.N.Y. May 25, 2007); *Calyon v. Mizuho Sec. USA Inc.*, No. 07CIV02241RODF, 2007 WL 1468889, at *1 (S.D.N.Y. May 18, 2007); *Hagenbuch v. 3B6 Sistemi Elettronici*, No. 04 C 3109, 2005 WL 6246195, at *1 (N.D. Ill. Sept. 12, 2005); *Zubulake v. UBS Warburg, L.L.C.*, 229 F.R.D. 422, 424 (S.D.N.Y. 2004).

This second edition of the pocket guide on the discovery of electronically stored information (ESI) follows the first—and the related 2006 amendments to the Federal Rules—by more than five years. These intervening years have seen an explosion of civil case law on ESI.²⁴

[14] While there is room for debate as to the etiology behind this explosion and the reasons behind such wholesale resistance of one culture to another, there can be little doubt that regardless of what we can, tongue in cheek, term the “uncertainty principle”²⁵ as to a precise description of the cause of the phenomenon before us, before us it is. Before us, it remains.

[15] Notwithstanding some observations that suggest even a hint of reconciliation between classical law and quantum law, such reconciliation remains much sought after. Its elusiveness caused Magistrate Judge John M. Facciola of the United States District Court of the District of Columbia to opine that, “[w]hen the dust settles 10 years from now and the scholars sit down cooperation will be seen as the most significant development from e-discovery.”²⁶ Obviously, Judge Facciola believes that cooperation among counsel will resolve the effects that the clash of cultures caused and restore some sense of balance to what has been a tumultuous world of

²⁴ BARBARA J. ROTHSTEIN, RONALD J. HEDGES & ELIZABETH C. WIGGINS, *MANAGING DISCOVERY OF ELECTRONIC INFORMATION: A POCKET GUIDE FOR JUDGES 1* (2012), available at [http://www.fjc.gov/public/pdf.nsf/lookup/eldscpkt2d_eb.pdf/\\$file/eldscpkt2d_eb.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/eldscpkt2d_eb.pdf/$file/eldscpkt2d_eb.pdf).

²⁵ See generally KUMAR, *supra* note 2, at 232. The “uncertainty principle” was developed by one of quantum physics’ great contributors, Werner Heisenberg, who postulated the theory that quantum mechanics “forbids, at any given moment, the precise determination of both the position and the momentum of a particle.” *Id.* It was not possible to know one, without increasing the uncertainty in knowledge about the other. *Id.*

²⁶ Michael Roach, *Judge Facciola Addresses Competency, Ethics, and E-Discovery*, L. TECH. NEWS, June 22, 2012.

litigation since the advent of ESI. This sentiment echoes a law firm blog entry a few years ago entitled “Sanctions Down; Cooperation Up; Preservation, Privacy and Social Media Remain Challenging.”²⁷ In this blog entry, the authors draw a silver lining around a drop in the number of requests for sanctions in 2010 as compared with 2009, believing it “reflects greater adeptness by litigants and counsel in e-discovery practice and broader acceptance of cooperation and openness in the e-discovery process.”²⁸ The statistics, however, carry with them that seemingly contradictory component typified by the clash of theories in classical and quantum physics. Any hint of resolution or cooperation between the classical and quantum worlds always seems to leave a statistical “outlier”²⁹ that defies ultimate peace between the two different approaches of looking at the same world.³⁰

²⁷ Bennett B. Borden et al., *Sanctions down; Cooperation up; Preservation, Privacy and Social Media Remain Challenging*, WILLIAMS MULLEN (Dec. 17, 2010), <http://www.williamsmullen.com/news/sanctions-down-cooperation-preservation-privacy-and-social-media-remain-challenging>.

²⁸ *Id.*

²⁹ An “outlier” is a statistical anomaly outside a group of otherwise patterned observation. See WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 1602 (Philip Babcock Gove ed., Merriam-Webster Inc. 2002) (defining “outlier” as “something that . . . is situated . . . away from a main or related body: as . . . a statistical observation not homogeneous in value with others of a sample”).

³⁰ See Sue Reisinger, *Kroll Study Sees Dramatic Drop in E-discovery Sanctions*, CORP. COUNS., Dec. 6, 2012, http://www.law.com/corporatecounsel/PubArticleCC.jsp?id=1202580414356&Kroll_Study_Sees_Dramatic_Drop_in_Ediscovery_Sanctions. Reisinger seems to make a similar stretch by suggesting that an attorney “learning curve is evident because the percent of prominent cases that imposed sanctions on parties, which had been on the rise, actually declined a whopping 10 percent in 2012, according to Kroll. . . . The [Kroll] survey, which used a non-scientific sampling of 70 major cases, found that the number of procedural disputes more than doubled over last year's figures.” *Id.* Again, the outlier. It is interesting that the statistics for Reisinger's 2011-2012 comparison mirror the results of the Borden article two years earlier. See Borden et al., *supra* note 27. Thus, a more than doubling of e-discovery motions practice from 2009 to 2010, and again from 2011 to 2012.

[16] While noting the drop, albeit slight, in requests for sanctions and the corresponding sanction decisions, a statistical anomaly that challenges what seems to be on the surface some promising data confronts the authors of the blog on the theme of cooperation increasing in e-discovery.³¹ “Although requests for sanctions decreased, motions to compel more than doubled in 2010, being filed in 43% of all e-discovery cases as opposed to 20% in 2009.”³² Like their counterparts in theoretical physics grappling with a bothersome experimental result to a hoped for theory, the blog authors suggest an explanation consistent with the proposed model of cooperation.³³ To paraphrase, court intervention was sought on only a small number of e-discovery issues in which counsel could not agree with the intimation because this occurred after much cooperation.³⁴

[17] But to some observers, these “laboratory results” from the world of quantum law which indicate a *doubling* in motions to compel in 2010 with motions filed in “43% of all e-discovery cases” may not be as accommodating or optimistic.³⁵ Indeed, it is a difficult argument to make that the spirit of cooperation between counsel, the suggested cause of the decreased number of sanctions, is more strongly attached to attorney behavior than perhaps a growing judicial discretion at the bench in meting them out.³⁶ It would seem that the same spirit of cooperation which led to a fewer number of requests for sanctions might be expected to play out at the motions practice level, which is driven solely by attorneys. It might be a stretch to attribute the doubling in the number of motions to compel in e-discovery cases to counsel who were doing their best to cooperate but got

³¹ See Borden et al., *supra* note 27.

³² *Id.*

³³ *See id.*

³⁴ *See id.*

³⁵ *Id.*

³⁶ See Borden et al., *supra* note 27.

hung up on the narrow technicalities of an e-discovery agreement, otherwise known as a “gosh, we all just missed that” moment. Filing a motion to compel was simply their last resort. The data suggest otherwise.³⁷

[18] To attribute a significant learning curve in the ranks of counsel to a decrease in the number of sanctions requested and sanctions ordered would be an understandable rush to judgment in the hope of some promising sign that the tide of the cultural clash is beginning to recede. One might similarly be impressed by the Equal Employment Opportunity Commission (“EEOC”) Performance and Accountability Report for the 2012 fiscal year, which indicates that the federal government is filing fewer lawsuits against companies.³⁸ One could infer from this statistic alone that companies are learning how to better comply with the EEOC requirements for establishing non-discriminatory work environments. As with the 2010 decrease in the number of e-discovery sanctions, there is an outlier to the decreasing number of lawsuits filed by the EEOC. “[T]he number of systemic discrimination investigations has increased four-fold.”³⁹ At the recent Georgetown Law Advanced E-Discovery Institute annual conference held in November 2012, one observer noted that frustration among the bench with lack of attorney cooperation continues:

Collectively, the group [of Judges] expressed frustration that lawyers were not taking the lead in EDD disputes, and thus, in essence, forcing the judges—rather than the parties themselves—to determine protocols and strategies. The

³⁷ *See id.*

³⁸ *See* Sue Reisinger, *EEOC 2012 Report Shows Fewer Discrimination Suits, More Investigations*, CORP. COUNS., Nov. 30, 2012, http://www.law.com/corporatecounsel/PubArticleCC.jsp?id=1202579787314&EEOC_2012_Report_Shows_Fewer_Discrimination_Suits_More_Investigations&slreturn=20130014154033.

³⁹ *Id.*

judges pushed several dominant themes: the need for lawyers to take the “meet and confer” obligations seriously; to educate themselves on technology options; and to be reasonable and realistic about e-discovery protocols⁴⁰

[19] This hardly sounds like growing sophistication and cooperation in the world of quantum law. Rather, it is as if the clash of cultures is still in its infancy, reflecting the reality captured a few years ago in a Federal Judicial Center survey, that “only one in three respondents reported that their 26(f) conference to plan discovery included a discussion of ESI. More than half of all respondents reported that the conference did not include discussion of ESI.”⁴¹

IV. WHAT THE FUTURE PORTENDS

[20] In discussing alternative explanations for the conflicting e-discovery data referenced above, it is possible in some measure to argue what the immediate future portends with regard to the practice of the e-discovery component of law and the continuing clash of cultures. The following loom on the horizon:

⁴⁰ Monica Bay, *Impatient Judges Push Lawyers to Dive into E-Discovery*, L. TECH. NEWS, Dec. 7, 2012, http://www.law.com/jsp/lawtechnologynews/PubArticleLTN.jsp?id=1202580623520&Impatient_Judges_Push_Lawyers_to_Dive_Into_Ediscovery.

⁴¹ Patrick Oot, Anne Kershaw & Herbert L. Roitblat, *Mandating Reasonableness in a Reasonable Inquiry*, 87 DENV. U. L. REV. 533, 539 (2010) (citing Emery G. Lee III & Thomas E. Willging, *Federal Judicial Center National, Case-Based Civil Rules Survey: Preliminary Report to the Judicial Conference Advisory Committee on Civil Rules*, FED. JUD. CENTER 1, 15 (Oct. 2009), [http://www.fjc.gov/public/pdf.nsf/lookup/dissurv1.pdf/\\$file/dissurv1.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/dissurv1.pdf/$file/dissurv1.pdf)).

A. A Continuing Increase in E-Discovery Motions Practice

[21] A growing number of attorneys, particularly at larger firms or with more sophisticated practices, are becoming increasingly adept at the practice of e-discovery and learning how to better comply with court expectations. Various federal circuits have initiated programs or local rules which, for the first time, set forth standardized expectations required of counsel. This had led to an appearance of greater cooperation. The Suggested Protocol for Discovery of Electronically Stored Information in the U.S. District Court, District of Maryland, and the Seventh Circuit's Electronic Discovery Pilot Program are two such examples.⁴² More attorneys are attempting to comply with local rules and procedures with regard to e-discovery simply because some now exist where before there were none.

[22] Litigation practitioners are putting to good use the resulting learning curve among attorneys indexed to increased participation in the e-discovery agreements required by local rules. But far from meaningful cooperation in resolving e-discovery issues, the doubling of motions practice from 2009 to 2010 and from 2011 to 2012 speaks volumes about what is really occurring.⁴³ Practitioners are becoming increasingly skilled and savvy in attempting to leverage the e-discovery advantage to tip the scales in their clients' favor.⁴⁴ It is much more likely that the doubling of

⁴² See, e.g., *Suggested Protocol for Discovery of Electronically Stored Information* ("ESI"), United States District Court for the District of Maryland, available at <http://www.mdd.uscourts.gov/news/news/ESIProtocol.pdf> (last visited Feb. 4, 2013); *Principles Relating to the Discovery of Electronically Stored Information*, 7th Circuit Electronic Discovery Committee (Aug. 1, 2010), available at http://www.discoverypilot.com/sites/default/files/Principles8_10.pdf.

⁴³ See Borden et al., *supra* note 27; Reisinger, *supra* note 30.

⁴⁴ See Ralph Losey, *E-Discovery Gamers: Join Me in Stopping Them*, E-DISCOVERY TEAM (June 3, 2012, 6:01 AM), <http://e-discoveryteam.com/2012/06/03/e-discovery-gamers-join-me-in-stopping-them/>.

motions to compel reflects this reality of the litigation process.⁴⁵ As participants in an adversarial process, litigators realize that they are advocating on behalf of their client and were not retained to enter the calmer waters of mediation practice. The future will carry this trend forward as more practitioners become aware that many federal and state courts will impose sanctions against adversaries vulnerable to the dynamic ESI legal environment. Moreover, the trending of an increase in the imposition of sanctions will result in growing attempts by counsel to leverage this potential tactical advantage in the courtroom.⁴⁶

B. Double-Dip Inflation in E-Discovery Practice

[23] While the American economy is haunted by the threat of double dipping back into a recessionary spiral, e-discovery practice is poised to experience the opposite economic effect. Indeed, e-discovery is poised to double-dip back into the inflationary spiral that the first clash of quantum law caused, which is a clash that saw the early and memorable monolithic sanctions dispensed in such cases as *Qualcomm* and *Zubulake*.⁴⁷ Many of the largest law firms and major e-discovery vendors cut their teeth on these magnificently large and complex cases. This was the playing field of much of the early e-discovery law. The practitioners involved in these types of cases are those that experienced the greatest knowledge building within the often-intimidating world of law associated with e-discovery practice.

⁴⁵ See *2011 Mid-Year E-Discovery Update*, GIBSON DUNN 1-2 (July 22, 2011), <http://www.gibsondunn.com/publications/Documents/2011Mid-YearE-DiscoveryUpdate.pdf>.

⁴⁶ The author has personally witnessed settlements ensuing quickly after a party realizes, often too late to be cured, that a potentially costly, if not fatal, e-discovery mishap yielded the adverse party a trump card.

⁴⁷ *Qualcomm Inc. v. Broadcom Corp.*, No. 05CV1958-B (BLM), 2008 WL 66932 (S.D. Cal. Jan. 7, 2008), *vacated in part*, No. 05CV1958-RMB (BLM), 2008 WL 638108, 88 U.S.P.Q.2d (BNA) 1169 (S.D. Cal. Mar. 5, 2008); *Zubulake v. UBS Warburg, L.L.C.*, 229 F.R.D. 422 (S.D.N.Y. 2004).

[24] As quantum law has made itself known as a practice, there is a growing awareness on the part of many counsel in how to leverage what can be termed the patterns of exposure characterizing e-discovery law. "Patterns of exposure" have to do with the breadth and depth of e-discovery law on a variety of issues. As an example, the law relating to the issuance of written litigation finds a home in many federal circuits and thus the pattern of exposure in litigation practice in any circuit is enormous. Whereas, more specific and narrowly detailed opinions such as *Phillip M. Adams & Associates, L.L.C. v. Winbond Electronics Corp.*, in which the court stated that one of the parties should have anticipated litigation based on other lawsuits happening in the industry, cannot be said to have created a significant exposure footprint; despite being bothersome, the exposure pattern is more slight.⁴⁸

[25] Newly enlightened practitioners in the art of e-discovery leveraging will see to it that the attendant motions practice and sanctions that confronted early practitioners will bleed down to the small or medium practices and cases.⁴⁹

C. Growth of the Pool of E-Discovery Victims

[26] As the bleed down phenomenon of e-discovery cases runs more quickly from the mountains of large firms and practices to the surrounding hills of the smaller litigation landscape, the borders of e-discovery motions practice will expand beyond those large firms and large cases to include many more victims. The pool of law firms confronting the exponentially growing world of ESI and its permeation into every corner of litigation of

⁴⁸ *Phillip M. Adams & Assocs., L.L.C. v. Winbond Elecs. Corp.*, No. 1:05-CV-64 TS, 2010 U.S. Dist. LEXIS 85120, at *12-13, *15-16 (D. Utah Aug. 17, 2010).

⁴⁹ Broadly speaking, practitioners at small and medium sized firms have escaped confronting the challenge that is quantum law in their practices while their colleagues at larger firms managing mega cases bore the brunt of this phenomenon in its early days. *See generally* Richard N. Lettieri, *Mid-to-Small Law Firm Alert: Overcoming the Growing E-Discovery "Skill Gap"*, THE ADVOCATE, Feb. 2012, at 12-14, available at http://www.lettierilaw.com/documents/the_advocate_02_2012.pdf.

every conceivable size is growing.⁵⁰ Indeed, for every law firm that is developing an acute awareness of the nuances of e-discovery law and of the expertise, both legal and practical, with which to navigate these arguably treacherous waters, there are others that have not. This is a victim pool. During the introduction of quantum theories, the scientific method required that the same phenomenon tested in a different laboratory setting must yield the same results. Results that were incompatible with classical physics eventually overwhelmed it. Similarly, the early cycle of quantum law will find new life and live again with the growth of the e-discovery victim pool, foreshadowing a growing motions practice and number of associated sanctions with this expanding pool of smaller firms and cases.

D. An Eventual Flattening of the E-Discovery Motions Practice and Sanctions

[27] The relatively recent pushback against rising e-discovery costs by companies of all sizes is a pushback against and a modifying force to the clash of quantum law. As with the downstream effect of growing e-discovery motions practice, this pushback will reach the newer practitioners who attempt to leverage this power as well. This reality will be more responsible for cooperation among counsel than the hope that litigators reach some mythic plateau of altruism as noble officers of the court. Also, as the next cycle of e-discovery practice bleeds down to a larger "victim pool" and runs its course, it should result in a certain equilibrium among practitioners who will know how to better manage the patterns of exposure attendant to ESI and the resulting portrait in jurisprudence related to e-discovery.

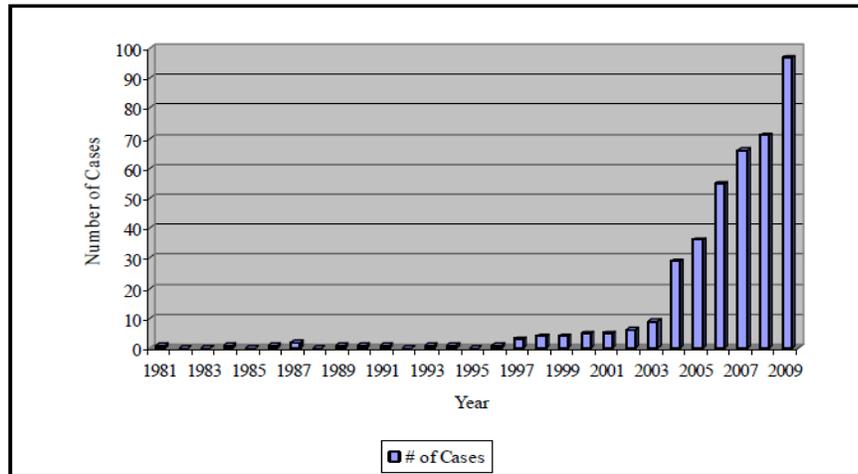
⁵⁰ See *id.* at 13-14.

V. CONCLUSION

[28] Rather than doubting intuition, practitioners should heed the lessons of the introduction of quantum physics while observing the changing landscape in e-discovery that results from the clash of cultures between classical law and quantum law. It may be comforting to classical practitioners that although quantum physics has yet to find a permanent home within the world of its classical counterpart, both now work side by side in what is seen as a quest of mutual interest of explaining the physical universe. Each acknowledges the other's legitimate role in the total picture and many of the early conflicts have been resolved. In time, quantum law will reach equilibrium with classical law and e-discovery practices will become as predictable and acceptable as the filing of a motion *in limine* or a motion for summary judgment.

APPENDIX: FIGURE 1⁵¹

Figure 1. Annual Number of E-Discovery Sanction Cases



⁵¹ Willoughby et al., *supra* note 5.