

Fabien GRÉGIS

Full list of communications

History and philosophy of science / Uncertainty, measurement, physics, metrology

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Invited Conference and Seminar Presentations

- 2022-06-20 “Epistemological reflections on the meaning of measurement uncertainties in metrology and precision physics”, PREN2022 Convention: International STRONG-2020 Workshop on the Proton Charge Radius and related topics, Sorbonne Université. June 20-23, 2022.
- 2021-08-04 “Approches fréquentistes et bayésiennes dans l’analyse des incertitudes de mesure: principes et enjeux épistémologiques”, LKB workshop
- 2020-16-12 “Savoir ce qu’on ne sait pas ? L’incertitude de mesure en métrologie et en physique”, séminaire “Approches historiques, philosophiques et anthropologiques des nombres, de la mesure et de la mesurabilité”, University of Paris
- 2018-11-04 “Stepping Away from the SI: The Case of Quantum Electrical Metrology”, 26th Biennial Meeting of the Philosophy of Science Association, November 1–4, Seattle, United States.
- 2018-04-17 “Standards, units and convention: the case of quantum electrical metrology”, 45th Annual Philosophy of Science Conference, Inter-University Centre, Dubrovnik, Croatia
- 2017-10-30 “Error, accuracy, and the assessment of uncertainty in the measurement of the fundamental physical constants”, Cohn Institute Seminar, Tel Aviv University, Tel Aviv, Israel
- 2017-04-21 « L’interprétation probabiliste de l’incertitude de mesure » (“The probabilistic interpretation of measurement uncertainty”), invited speaker to the seminar « Probabilités, Décision, Incertitude » (“Probabilities, Decision, Uncertainty”), IHPST, Paris
- 2017-03-31 « L’interprétation probabiliste de l’incertitude de mesure » (“The probabilistic interpretation of measurement uncertainty”), invited speaker to the seminar « Séminaire d’Histoire du Calcul des Probabilités et des Statistiques » (“History of the probability calculus and of statistics”), EHESS & CAMS, Paris

- 2017-02-08 « L'interprétation probabiliste de l'incertitude de mesure » (“The probabilistic interpretation of measurement uncertainty”), invited speaker to the seminar « Histoire des sciences mathématiques » (“History of mathematical sciences”), Institut de Mathématiques de Jussieu-Paris Rive Gauche
- 2016-11-14 « L'incertitude de mesure au contact entre science et philosophie » (“Measurement uncertainty at the frontier between science and philosophy”), invited speaker to the workshop « Perspectives interdisciplinaires sur l'histoire d'incertitude » (“Interdisciplinary perspectives on the history of uncertainty”), Maison des Sciences de l'Homme et de la Société Sud-Est, Université Nice Sophia Antipolis, Nice, France, November 14th, 2016
- 2016-05-20 “About measurement accuracy and measurement uncertainty”, invited panel speaker at the international workshop “Informal Aspects of Uncertainty Evaluation”, Department of History and Philosophy of Science, University of Cambridge, Cambridge, United Kingdom
- 2016-04-28 « Le rôle de l'idéalisation et de l'approximation dans la conception des grandeurs physiques » (“The role of idealization and approximation in the design of physical quantities”), invited speaker to the Journées bisontines de didactique et d'épistémologie (Besançon days for educational sciences and epistemology), Laboratory of Mathematics and Superior Schools of Teaching and Education, University de Franche-Comté, Besançon, France, April 28th and 29th, 2016
- 2014-01-13 “Error and uncertainty in contemporary metrology”, invited speaker to the international workshop “Approximations and error in several contexts”, seminar of History and Philosophy of Mathematics, University Paris 7
- 2012-11-22 « L'erreur de mesure, entre incertitude et confiance » (“Measurement error: between uncertainty and confidence”), invited speaker to the 2012 “Cathy Dufour” colloquium on “error in science”, 22–23 November 2012, department of Science and Technology of the University of Lorraine, Vandoeuvre, France
- 2012-11-09 with Nadine de Courtenay: « Le *Guide pour l'expression de l'incertitude de mesure* (GUM): un terrain de discussion entre fréquentistes et bayésiens » (“The *GUM*, a field of discussion between frequentist and Bayesians”), invited speaker to the seminar « Probabilités, Décision, Incertitude » (“Probabilities, Decision, Uncertainty”), IHPST, Paris

Peer-Reviewed Conference and Seminar Presentations

- 2017-06-26 “The meanings of error and accuracy in the adjustments of the physical constants”, workshop “Perspectives on scientific error”, TiLPS, Tilburg University, Netherlands, 26-27 June 2017
- 2017-06-12 “Could there be non-unique ‘true values’ of measurands? An account of definitional uncertainty”, workshop “Physical quantities and measurands: Epistemological issues”, University Paris 7, June 12th 2017
- 2016-11-25 « Raymond T. Birge et l’ajustement des constantes de la physique » (“Raymond T. Birge and the adjustment of physical constants”), 2016 Youth Researchers Days in history of science and technology. Organized by the SFHST, the SHESVIE, the SFHSH, the CoFrHiGeo and the History of Chemistry Club, École normale supérieure, Paris, 25–26 November 2016
- 2016-07-01 « La notion de précision expérimentale dans les ajustements des constantes de la physique » (“The notion of experimental precision in the adjustments of the physical constants”), 6th international congress of the Société de Philosophie des Sciences, University of Lausanne, Switzerland, June 29th – July 1st, 2016
- 2015-07-23 with Nadine de Courtenay: “Grappling with Measurement Uncertainties: Philosophy of Practice and Practice of Philosophy”, international conference “The Making of Measurement”, CRASSH (Centre for Research in the Arts, Social Sciences and Humanities), Cambridge, United Kingdom, 23–24 July 2015
- 2014-09-25 « L’incertitude définitionnelle, une limite ultime à la précision des mesures? » (“Does definitional uncertainty represent an ultimate limit to the precision of measurements?”), International doctoral meetings in philosophy of science (RDIPS), Société de Philosophie des Sciences, Louvain-La-Neuve, 25–26 September 2015
- 2014-01-21 “The International System of Units as an illustration of the social, epistemic and practical values of metrology”, “Modes of Technoscientific Knowledge” winterschool, Manigod (France), 19–25 January 2014
- 2013-03-15 “Can we dispense with the notion of true value in metrology?”, international conference “Dimensions of Measurement”, 14–16 March 2013, ZiF (Zentrum für interdisziplinäre Forschung), Bielefeld, Germany
- 2012-12-04 with Nadine de Courtenay: “Questions raised by the epistemic turn in the Guide to the expression of uncertainty in measurement (GUM)”, international workshop “The taming of measurement uncertainties: Theoretical, philosophical, and practical issues”, University Paris 7
- 2012-09-13 « De l’erreur à l’incertitude: la critique de la notion de “valeur vraie” dans la mesure » (“From error to uncertainty, the criticism of the notion of ‘true value’ in measurement”), Doctoral meetings in philosophy of science (RDPS), Société de Philosophie des Sciences, Paris

Research Group Meetings and Doctoral Meetings Interventions

- 2013-02-07 « Modèles, idéalisation et approximation » (“Models, idealization and approximation”), SPHERE PhD students’ working group in history and philosophy of physics
- 2012-06-18 « Les usages de l’erreur de mesure dans les ajustements des constantes fondamentales de la physique au XXe siècle » (“The uses of measurement error in the adjustments of the fundamental constant of physics in the XXst century”), doctoral meetings in History and Philosophy of Science, Archives Henri Poincaré, Nancy, France
- 2011-06-30 « La connaissance et l’erreur. Approches philosophiques sur la mesure et exemple du *Guide pour l’expression de l’incertitude de mesure* » (“Knowledge and error. Philosophical approaches on measurement with the example of the *Guide to the expression of uncertainty in measurement*”), SPHERE doctoral meeting, University Paris 7

Public outreach

- 2019-10-11 With Helmy Chekir (Univ. Paris Diderot), workshop “Measuring gravity” for high school students, given at the 2019 Science Fair at University Paris Diderot.