

Michel Broué, Professeur émérite, Université Paris-Diderot

Foreign Honorary Member of the **American Academy of Arts and Sciences.**

Fellow of the **American Mathematical Society.**

Membre Senior de l' **Institut Universitaire de France.**

July 2nd, 2019

Brief Curriculum Vitae

Michel Broué, born October 28, 1946,
Emeritus Professor of Mathematics (*Professeur émérite, classe exceptionnelle 2ème échelon*)
Université Paris-Diderot Paris 7,
Senior Member of the **Institut Universitaire de France.**

Main responsibilities during the career :

- 1980 : elected as Professor at the Université Paris-7.
- 1986–1993 : Director and creator of the *Département de Mathématiques et d'Informatique (DMI)* and of the *Laboratoire de de Mathématiques* of the l'**École normale supérieure.**
- 1999–2009 : Director of the l'**Institut Henri-Poincaré.**
- 2001–2017 : Editor-in-chief of the **Journal of Algebra.**
- Member of the editorial committee of *Algebra Colloquium* and of Books Series *Algebra and Applications* (Springer–Verlag) since 2015.
Member of editorial committee of *Journal of Group Theory* (1998–2014) and of editorial committee of *Journal of Pure and Applied Algebra* (1998–2008).
- **Other responsibilities over the years :**

- In France :
Director of a CNRS team for 12 years, member of the National Committee of CNRS, Member of the Board of trustees du CIRM, Chairman of the scientific committee of the Mathematics Department of the Université Paris-Diderot, ...
- Abroad :
Member of the Board of Trustees of Isaac Newton Institute for six years, Member of the International Evaluation Committee of British Mathematics, Member of the International Evaluation Committee of EPFL (Lausanne), Frequent evaluator of DFG Programs, Member of the Board of Trustees of EPFL Bernoulli Center since 2012,,...

Distinctions :

- Frequent visitor and invited Professor in several foreign institutions :
Universities of Chicago, Yale, Berkeley, Minnesota, Virginia, Sydney, Cambridge, Oxford, Birmingham, Heidelberg, Aarhus, Beijing, ETH Zürich, EPF Lausanne, NYU-AD, UCLA.
Besides,
 - Prize of the Académie des Sciences Paris (1986),
 - Invited Speaker to the International Congress of Mathematicians (Berkeley, 1986),
 - G.C. Stewart Fellow of Caius College Cambridge (1997) and Fellow of Churchill College Cambridge (2008),
 - Main Lecturer of the American Mathematical Society CBMMS Summer Institute (1998),
 - Ordway Professor et University of Minneapolis (1999),
 - Main Lecturer of “*Contemporary Mathematics*”, Harvard–MIT (2000),
 - Main Lecturer of “*Albert Lectures*”, University of Chicago (2003),
 - Docteur Honoris Causa of the University of Birmingham (2004),
 - Chancellor’s Professor at l’University of California Berkeley (2008),
 - Abel Lecturer for the Abel Prize ceremony, Oslo (2008),
 - Invited Professor (“*Foreign Expert*”) at Peking University PKU (2012–2016),
 - Fellow of the American Mathematical Society (2013),
 - Foreign Honorary Member of the American Academy for Arts and Sciences (2014),
 - Main Lecturer of the British Mathematical Colloquium (2019).

- Member or recruiting committees of several institutions, including Cambridge and Oxford Universities.
Member of various Steering Committees, including Newton Institute (Cambridge), and still Bernoulli Center.
- Organiser of many conférences, workshops, summer schools, research semesters (MSRI Berkeley, Newton Institute Cambridge, CIRM Luminy, Oberwolfach, IEP Cargèse,...)
- Advisers of 13 thesis, and in particular : Marc Cabanes (CNRS), Raphaël Rouquier (Professor at UCLA), Serge Bouc (CNRS), David Bessis (CEO of TinyClues), Maria Chlouveraki (Maître de Conférences & CNRS).
Ten years of Master Course at Paris-Diderot recruiting to research mathematicians like Cédric Bonnafé, Olivier Dudas, Abel Lacabanne, Peng Shan, Valentin Féray, etc.

Research :

- Main area: *Algebra and Representation Theory*, in particular *Finite and Algebraic Groups Representations and connected areas* : see for example [Google Scholar](#) or [MathSciNet](#), or [Abelian Defect Group Conjecture Site](#) or [home page](#).

• Twelve selected publications

- (1978) M. Broué, *Radical, Hauteurs, p -Sections et Blocs*, Ann. of Math. **107**, 89–107.
- (1979) J.L. Alperin, M. Broué, *Local Methods in Block Theory*, Ann. of Math. **110**, 143–157.
- (1980) M. Broué, Ll. Puig, *A Frobenius theorem for blocks*, Invent. Math. **56**, 117–128.
- (1990) M. Broué, *Isométries parfaites, types de blocs, catégories dérivées*, Astérisque **181–182**, 61–92.
- (1993) M. Broué, G. Malle, *Zyklotomische Heckealgebren*, Astérisque **212**, 119–189.
- (2001) M. Broué, *Reflection Groups, Braid Groups, Hecke Algebras, Finite Reductive Groups*, Current Developments in Mathematics 2000, Harvard University, Internat. Press (Boston).
- (2009) M. Broué, *Higman criterion revisited*, Michigan Math. Journal **58**, pages 125–179.
- (2010) [Book] M. Broué, *Complex Reflection Groups and their Braids*, Springer Lecture Notes in Mathematics **1968**, 138 pages.
- (2013) [Book] M. Broué, *Some Topics in Algebra*, Springer, Mathematical Lectures from Peking University, 201 pages.
- (2014) M. Broué, G. Malle, J. Michel, *Split Spets for primitive reflection groups*, Astérisque **359**, pages 1–146.
- (2018) M. Broué, R. Corran, J. Michel, *Cyclotomic root systems and bad primes*, Advances in Mathematics **325**, pages 375–348.

(2018) [**Book**] M. Broué, *On Characters of Finite Groups*, Springer, Mathematical Lectures from Peking University, 246 pages.

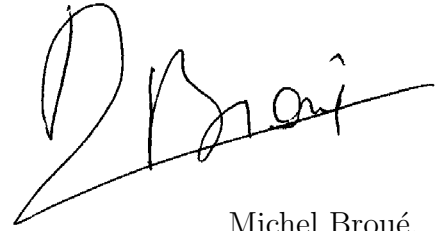
Mathematics for a large audience, Vulgarisation, Médias

- Talks for a large and various audience (like the French *Festival des Mots*) — see [home page](#), or for example [video](#).
- In 2015, 2016, 2017, a 36 hours “Core Course” at New-York University Abu Dhabi, intitled “*About Mathematics*”, for the *non mathématiques students*.
- Invited to Radio Broadcasts like [France Musique](#), [France Culture](#), [General news](#),...
- Several talks, plus a widely quoted paper, on “*Music and Mathematics*” — M. Broué: [Les tonalités musicales vues par un mathématicien](#), Le temps des savoirs, **3**, Odile Jacob, Paris (2001).
- In charge of the mathematics news for the newspaper [Les Échos](#) for two years (before resigning in 2017). Occasional papers in *Le Monde*.

Some recent invitations, current research :

- 2016 : A week at Princeton University (USA). A plenary lecture to the Conference in honor of John Conway.
- 2016 : Two months as invited professor at New-York University–Abu Dhabi. One “Core Course” (36 heures) : “About Mathematics”.
- 2016 : Two months at BICMR, Beijing, China. One Master course, three specialized talks.
- 2016 : One week in Samos (Greece). A lecture at the Conference on Representation Theory.
- 2016 : One week at CIRM working on Representations of finite reductive groups.
- 2016 : One month at Bernoulli Institute (Lausanne). One plenary talk.
- 2017 : Two months as invited professor at New-York University–Abu Dhabi. One “Core Course” (36 heures) : “About Mathematics”.
- 2017 : One month at SUSTech, Shenzhen (Chine). One 12 hours course on the Summer School : “The language of categories”
- 2017 : One week in BIRS, Banff (Canada).

- 2018 : One month at UCLA, Los Angeles (Californie), invited by Raphaël Rouquier – work on our common project of book in the *Ergebnisse Series* (Springer-Verlag).
- 2018 : Two months as *Research Member* at MSRI , Berkeley (Californie). One Colloquium talk at the University of California at Santa Cruz.
- 2019 : One Colloquium talk at the University of Coimbra (Portugal).
- 2019 : One plenary talk at [Group Theory Berlin](#).
- 2020 : Two months as *Simons Fellow* at Isaac Newton Institute, Cambridge.

A handwritten signature in black ink, appearing to read 'M Broué', with a long horizontal stroke extending to the right.

Michel Broué.