

# Enlargement of filtrations

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Since the occurrence of the global financial crisis, the field of enlargement of filtrations sees a vigorous revival in relation with applications such as counterparty risk or insider trading. Triggered by new questions arising from financial problems, important progress was made on theoretical questions such as the semimartingale decomposition, the optional slitting formula, martingale representation or BSDEs in progressively enlarged filtration setups. In addition, the need to extend the credit risk reduced-form modeling approach beyond the basic immersion setup of the classical paradigm (for counterparty wrong way risk applications, in particular) prompted the introduction of new classes of random times.

In 2016, the Laboratoire de Mathématiques et Modélisation d'Évry and The Institute of Mathematics of the University of Zurich jointly organized two companion workshops on enlargement of filtrations and financial applications. The first part was held in Paris on May 2-3 and the second part in Zurich on September 8-9. The focus was both expository, including a keynote presentation by Thierry Jeulin about the beginnings of enlargement of filtrations in the 1980s, and cutting-edge, with recent developments in relation with topical mathematical finance issues.

We are delighted to present this volume of related papers, also including original excerpts of Marc Yor's scientific testaments (the parts of the 2006 and 2014 versions in relation with enlargement of filtration), published with the agreement of the family, which we thank warmly. We are also grateful for the financial support of the "Chair Markets in Transition", Fédération Bancaire Française, and of the ANR project 11-LABX-0019.