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   Autore   Filipovic Damir

   Titolo   Consistency Problems for Heath-Jarrow-Morton Interest Rate Models /
                         / by Damir Filipovic

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   Soggetti   Applied mathematics
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   Lingua di pubblicazione   Inglese

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   Nota di bibliografia Includes bibliographical references (pages [129]-131) and index.

   Nota di contenuto   Introduction -- Stochastic Equations in Infinite Dimension --
                         Consistent State Space Processes -- The HJM Methodology Revisited --
                         The Forward Curve Spaces H_w -- Invariant Manifolds for Stochastic
                         Equations -- Consistent HJM Models -- Appendix: A Summary of
                         Conditions.

   Sommario/riassunto   The book is written for a reader with knowledge in mathematical
                         finance (in particular interest rate theory) and elementary stochastic
                         analysis, such as provided by Revuz and Yor (Continuous Martingales
                         and Brownian Motion, Springer 1991). It gives a short introduction both
                         to interest rate theory and to stochastic equations in infinite dimension.
                         The main topic is the Heath-Jarrow-Morton (HJM) methodology for the
                         modelling of interest rates. Experts in SDE in infinite dimension with
                         interest in applications will find here the rigorous derivation of the

popular "Musiela equation" (referred to in the book as HJMM equation). The convenient interpretation of the classical HJM set-up (with all the no-arbitrage considerations) within the semigroup framework of Da Prato and Zabczyk (Stochastic Equations in Infinite Dimensions) is provided. One of the principal objectives of the author is the characterization of finite-dimensional invariant manifolds, an issue that turns out to be vital for applications. Finally, general stochastic viability and invariance results, which can (and hopefully will) be applied directly to other fields, are described.