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Titolo	Consistency Problems for Heath-Jarrow-Morton Interest Rate Models [[electronic resource] /] / by Damir Filipovic
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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 "Musielà 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.

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