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	Nota di contenuto	Part I Renewable energy: modeling and forecasting -- Alain Bensoussan and Alexandre Brouste -Marginal Weibull diffusion model for wind speed modeling and short-term forecasting -- Bastien Alonzo, Riwal Plougonven, Mathilde Mougeot, Aurélie Fischer, Aurore Dupré, and Philippe Drobinski-From Numerical Weather Prediction outputs to accurate localsurface wind speed : statistical modeling and forecasts. - Mireille Bossy, Aurore Dupr´e, Philippe Drobinski, Laurent Violeau, and Christian Briard-Stochastic Lagrangian approach for wind farm simulation -- Jordi Badosa, Emmanuel Gobet, Maxime Grangereau and Daeyoung Kim-Day-ahead probabilistic forecast of solar irradiance: a Stochastic Differential Equation approach -- Mathilde Mougeot, Dominique Picard, Vincent Lefieux, Miranda Marchand-Homogeneous climate regions using learning algorithms -- Andrs Castrillejo, Jairo

Cugliari, Fernando Massa, and Ignacio Ramirez- Electricity Demand Forecasting: the Uruguayan Case Eugene A. Feinberg and Jun Fei -A Flexible Mixed Additive-Multiplicative Model for Load Forecasting in a Smart Grid Setting -- Jérôme Collet and Michael Richard- A Generic Method for Density Forecasts Recalibration -- Part II Renewable energy: risk management -- Vera Silva, Miguel López-Botet Zulueta, Ye Wang, Paul Fourment,Timothee Hinchliffe, Alain Burtin, and Caroline Gatti-Bono-Technical and economic analysis of the European electricity system with 60% renewable energy sources -- Deschatre and Almut E. D. Veraart-A joint model for electricity spot prices and wind penetration with dependence in the Thomas -- James Cruise and Stan Zachary-The optimal control of storage for arbitrage and buffering, with energy applications -- Jérôme Collet, Olivier Féron, and Peter Tankov-Optimal management of a wind power plant with storage capacity.-References.

| Sommario/riassunto | Gathering selected, revised and extended contributions from the conference 'Forecasting and Risk Management for Renewable Energy FOREWER', which took place in Paris in June 2017, this book focuses on the applications of statistics to the risk management and forecasting problems arising in the renewable energy industry. The different contributions explore all aspects of the energy production chain: forecasting and probabilistic modelling of renewable resources, including probabilistic forecasting approaches; modelling and forecasting of wind and solar power production; prediction of electricity demand; optimal operation of microgrids involving renewable production; and finally the effect of renewable production on electricity market prices. Written by experts in statistics, probability, risk management, economics and electrical engineering, this multidisciplinary volume will serve as a reference on renewable energy risk management and at the same time as a source of inspiration for statisticians and probabilists aiming to work on energy-related problems. |