

1. Record Nr.	UNINA9910254075203321
Autore	Bevilacqua Andrea
Titolo	Doubly Stochastic Models for Volcanic Hazard Assessment at Campi Flegrei Caldera // by Andrea Bevilacqua
Pubbl/distr/stampa	Pisa : , : Scuola Normale Superiore : , : Imprint : Edizioni della Normale, , 2016
ISBN	88-7642-577-2
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (234 p.)
Collana	Theses (Scuola Normale Superiore), , 2532-1668 ; ; 21
Disciplina	510
Soggetti	Probabilities Environmental sciences Physics Natural disasters Probability Theory Environmental Physics Natural Hazards
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Vent opening probability maps -- Pyroclastic density current invasion maps -- Time-space model for the next eruption -- Addendum -- Supporting information.
Sommario/riassunto	This study provides innovative mathematical models for assessing the eruption probability and associated volcanic hazards, and applies them to the Campi Flegrei caldera in Italy. Throughout the book, significant attention is devoted to quantifying the sources of uncertainty affecting the forecast estimates. The Campi Flegrei caldera is certainly one of the world's highest-risk volcanoes, with more than 70 eruptions over the last 15,000 years, prevalently explosive ones of varying magnitude, intensity and vent location. In the second half of the twentieth century the volcano apparently once again entered a phase of unrest that continues to the present. Hundreds of thousands of people live inside the caldera and over a million more in the nearby city of Naples, making a future eruption of Campi Flegrei an event with potentially catastrophic consequences at the national and European levels.

