



# Multiscale Modeling of Pedestrian Dynamics (MS&A)

By *Emiliano Cristiani, Benedetto Piccoli, Andrea Tosin*

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**Multiscale Modeling of Pedestrian Dynamics (MS&A)** By Emiliano Cristiani, Benedetto Piccoli, Andrea Tosin

This book presents mathematical models and numerical simulations of crowd dynamics. The core topic is the development of a new multiscale paradigm, which bridges the microscopic and macroscopic scales taking the most from each of them for capturing the relevant clues of complexity of crowds. The background idea is indeed that most of the complex trends exhibited by crowds are due to an intrinsic interplay between individual and collective behaviors. The modeling approach promoted in this book pursues actively this intuition and profits from it for designing general mathematical structures susceptible of application also in fields different from the inspiring original one. The book considers also the two most traditional points of view: the microscopic one, in which pedestrians are tracked individually and the macroscopic one, in which pedestrians are assimilated to a continuum. Selected existing models are critically analyzed. The work is addressed to researchers and graduate students.

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## **Editorial Review**

### Review

“The book is very well-written and contains many excellent illustrations. It is both a valuable introduction to the modeling of pedestrian dynamics and to the methods of multiscale modeling.” (Martin Gugat, zbMATH 1314.00081, 2015)

### From the Back Cover

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This book entitled Multiscale Modeling of Pedestrian Dynamics (MS&A) to be one of several books which best seller in this year, that is because when you read this publication you can get a lot of benefit upon it. You will easily to buy that book in the book shop or you can order it by using online. The publisher with this book sells the e-book too. It makes you more easily to read this book, as you can read this book in your Cell phone. So there is no reason to you personally to past this e-book from your list.

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**Robert Barker:**

Playing with family in a very park, coming to see the sea world or hanging out with friends is thing that usually you have done when you have spare time, and then why you don't try issue that really opposite from that. One particular activity that make you not feeling tired but still relaxing, trilling like on roller coaster you have been ride on and with addition info. Even you love Multiscale Modeling of Pedestrian Dynamics (MS&A), you can enjoy both. It is fine combination right, you still desire to miss it? What kind of hang-out type is it? Oh seriously its mind hangout fellas. What? Still don't buy it, oh come on its referred to as reading friends.

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