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Ramis Örlü · Alessandro Talamelli  
Martin Oberlack · Joachim Peinke  
Editors

# Progress in Turbulence VII

Proceedings of the iTi Conference  
in Turbulence 2016

 Springer

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# Preface

The iTi has become an established biannual conference on turbulence research taking place in the years between the ETC—(European Turbulence Conference) and TSFP—(Turbulence and Shear Flow Phenomena) conferences. With 80 to 100 participants, the iTi conference places value on the discussions and personal contacts in the location of the beautiful town of Bertinoro in Northern Italy close to Bologna. It continues a tradition that has been started in Bad Zwischenahn/Germany with the first edition of the conference in 2003. The size of the conference allows to have no parallel sessions and gives time to special topics to be stressed. The content-related focus areas of the conference are the interdisciplinary aspects of turbulence, defining the abbreviation iTi—interdisciplinary Turbulence initiative. iTi attracts scientist from the engineering, physics, and mathematics communities.

It has been a tradition of the iTi to organize a one-day workshop before the iTi conference on a distinct theme out of the wide spectrum of turbulence research. The present workshop was on *High Reynolds number turbulent flows—A large-scale infrastructure perspective*. The 7th iTi in 2016 conference hosted 90 scientists from 15 different countries. In total, there were 78 contributions, from which 50 were presented as talks, with six invited talks, covering a wide range of aspects of current turbulence research. Advances in the basics of understanding and modeling turbulence were addressed as well as practical implications such as the control of turbulence.

The content of the 7th iTi conference is documented in this volume comprising 35 contributions. All contributions were thoroughly reviewed by external reviewers, to whom we want to express our thanks for their valuable and important contribution. Both the workshop and conference were sponsored by the European High-performance Infrastructures in Turbulence (EuHIT). EuHIT is an international scientific mobility programme for researchers engaged in turbulence research ([www.euhit.org](http://www.euhit.org)).



Based on the successful previous conferences, we will continue with this initiative for subsequent years with the 8th iTi Conference planned for September 2018.

Stockholm, Sweden  
Forlì, Italy  
Darmstadt, Germany  
Oldenburg, Germany  
2017

Ramis Örlü  
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