Preface

The Gothenburg 2010 Workshop on CFD in Ship Hydrodynamics was the sixth in a series starting in 1980. The purpose of the Workshops is to assess the state of the art in CFD for hydrodynamic applications. Active researchers in the field worldwide are invited to provide computed results for a number of well specified test cases, and the organizers collect and present the results such that comparisons between different methods can be made easily. Detailed information about each method is also reported via a questionnaire provided by the organizers. All results are discussed at a meeting, and a final assessment of the workshop is made by the organizers.

The present workshop attracted 33 groups from all over the world, and different types of computations were carried out for three hulls. It was by far the largest of the workshops in the series so far. All computed results were compiled in a volume, called Proceedings II, and distributed at the meeting, which was held in Gothenburg 8–12 December 2010. Unlike previous workshops, there was no presentation of submitted papers. Instead, the three main organizers gave reviews of the submitted results at the meeting, and most of the time was spent on discussions of these reviews.

In this book, updated versions of the reviews are presented, together with a verification and validation study of the submitted resistance predictions, as well as new measurement data obtained after the workshop and a comprehensive set of additional computations carried out by the organizers to investigate topics of particular interest found at the meeting. The book has been written by the three main organizers and their co-workers. Together with supplementary information on the website extras.springer.com the book constitutes the final documentation of the Gothenburg 2010 Workshop and gives a state-of-the-art assessment of the CFD capabilities within the area of Ship Hydrodynamics.

Gothenburg, Iowa City and Nantes
March 2013
Lars Larsson, Frederick Stern and Michel Visonneau
Numerical Ship Hydrodynamics
An assessment of the Gothenburg 2010 Workshop
Larsson, L.; Stern, F.; Visonneau, M. (Eds.)
2014, IX, 318 p. 170 illus., 20 illus. in color., Hardcover
ISBN: 978-94-007-7188-8