

Foreword

Leonhard Euler was born on 15 April 1707 in Basel, Switzerland. Euler was the leading mathematician of the eighteenth century and one of the foremost mathematicians of all time. He made seminal contributions to many areas of pure and applied mathematics including differential and integral calculus, particle and rigid body mechanics, differential equations, graph theory, the calculus of variations and fluid mechanics. The major work “Principles Gneraux du Movement des Fluids” in which Euler derived the equations of flow of an ideal fluid was published two hundred and fifty years ago in 1757.

In order to commemorate the Tercentenary of Euler’s birth the Centre for Differential Equations, Continuum Mechanics and Applications at the University of the Witwatersrand held an Euler Tercentenary Workshop on 3 and 4 August 2007. The guest speaker at the Workshop was Professor George Bluman of the Department of Mathematics, University of British Columbia, Vancouver, Canada. This special issue of the Journal of Nonlinear Mathematical Physics consists of a selection of refereed papers presented at the Euler Tercentenary Workshop. The areas of research covered by the papers are all areas in which Euler worked: differential equations, conservation laws and fluid mechanics.

We acknowledge the financial support for the Euler Tercentenary Workshop granted by the Deputy Vice-Chancellor (Academic) at the University of the Witwatersrand, Professor Yunus Ballim, the Head of the School of Mathematics, Professor Manfred Moller, the Head of the School of Computational and Applied Mathematics, Professor David Sherwell and the Chairman of the Science Faculty Research Committee, Professor Fazal Mahomed.

The commemorative plaque to Euler at Riehen ends with these words:

“He was a great scholar and a kind man”.

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