



## **VIRTUE – The Virtual Towing Tank Utility in Europe**

### **Workshop SMM – 24 September 2008**

The European Union funded Integrated Project VIRTUE – “The Virtual Towing Tank Utility in Europe” develops largely enhanced CFD tools and an Integration Platform to meet the requirements of future ship design and hydrodynamic analysis.

During the SMM trade fair, VIRTUE will hold a public workshop to present major results achieved in the project so far.

The workshop addresses main features of leading edge CFD developments and is directed at ship designers, users of CFD and customers interested in the potential, the capabilities and limits of advanced numerical fluid flow simulations.

#### **Workshop Programme:**

1. **The VIRTUE Project – Towards the numerical towing tank**, Jochen Marzi, HSVA, D
2. **VIRTUE Workpackage 1: Enhancing the use of CFD in practical ship design**, Hoyte C. Raven, MARIN, NL
3. **Increase capabilities and efficiency of CFD tools to predict ship response in waves - Added values of the Virtue Sea-keeping Tank**, PRD, Atkins, ECN, SU, BEC
4. **Recent progress in the Virtual Manoeuvring Tank**, Qiuxin Gao, SSRC, UK
5. **The Virtual Cavitation Tank – Propeller performance and cavitation predictions**, Tom van Terwisga, MARIN, NL
6. **The Virtual Integration Platform – An approach towards a holistic hydrodynamic analysis**, Alex Duffy, SU-CAD, UK
7. **Towards a CFD-based prediction of ship performance** Hoyte C. Raven, Auke van der Ploeg; MARIN, NL
8. **LES simulations for propellers with unsteady cavitation**, Rickard Bensow, Chalmers Univ., Sweden
9. **RANS based Ship hullform Optimisations using the Virtual Integration Platform –** S. Gatchell, HSVA, D; S. Harries Friendship Systems, D.