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ABSTRACT

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INTRODUCTION

This is the LaTeX template for the 32nd Symposium on Naval Hydrodynamics, held in August 2018 in Hamburg, Germany. Papers must be uploaded in PDF-format. Please visit the symposium website (<https://www.tuhh.de/SNH2018/>) for detailed information on style guidelines for the paper, paper upload, deadlines and Microsoft Word/LaTeX template files.

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An example how to write equations is

$$\frac{d}{dt} \int_V \rho dV + \int_S \rho (\mathbf{v} - \mathbf{v}_g) \cdot \mathbf{n} dS = 0 \quad , \quad (1)$$

$$\frac{d}{dt} \int_V \rho u_i dV + \int_S \rho u_i (\mathbf{v} - \mathbf{v}_g) \cdot \mathbf{n} dS = \int_S (\tau_{ij} \mathbf{i}_j - p \mathbf{i}_i) \cdot \mathbf{n} dS + \int_V \rho g \mathbf{i}_i dV \quad , \quad (2)$$

with control volume V bounded by the closed surface S , velocity vector \mathbf{v} of the fluid with the Cartesian components u_i , grid velocity \mathbf{v}_g , unit vector \mathbf{n} normal to S and pointing outwards, time t , pressure p , fluid density ρ , components τ_{ij} of the viscous stress tensor, unit vector \mathbf{i}_j in direction x_j , and gravitational acceleration \mathbf{g}_i in direction x_i . Equations are referenced as Eq. (1) or Eqs. (1) to (2).

An example image is shown in Fig. 1.

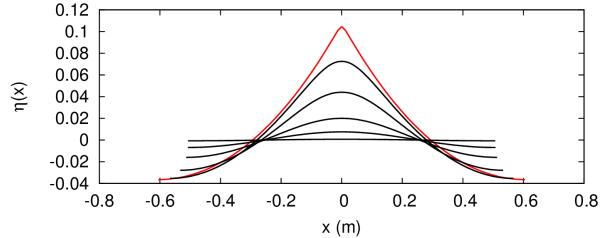


Figure 1: Surface elevation η over location x in wave-propagation direction for regular deep water waves with period $T = 0.8$ s and different wave heights, according to stream function theory; the red curve shows the solution close to breaking steepness

An example table is shown in Tab. 1.

Table 1: Main data of model propeller

Diameter	D	0.3 m
Hub ratio	d_h/D	0.4

METHODS

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RESULTS

Experimental Results

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Flow Simulation Results

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DISCUSSION

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CONCLUSION

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ACKNOWLEDGEMENTS

This work was supported by ...

REFERENCES

Taunton, D. J., Hudson, D. A. and Shenoi, R. A., "Characteristics of a Series of High Speed Hard Chine Planing Hulls—Part II: Performance in Waves," International Journal of Small Craft Technology, Vol. 153, 2011, pp. B1–B22.

Knupp, P. M. and Steinerg, S., Fundamentals of grid generation, CRC Press, Inc., 1993.