Plane-Wall Diffuser flow - Plane equilibrium flow between diverging plane walls.
Jonsson, I. G., PhD Student, Department of Hydrodynamics and Water Resources
Møller, J. S., Main Supervisor, Campus Service
01/10/1964 → 15/12/1969
Project: PhD

Spektral modelering af vindbølger på lavt vand
Rasmussen, J. H., PhD Student, Department of Hydrodynamics and Water Resources
Jonsson, I. G., Main Supervisor, Department of Hydrodynamics and Water Resources
Selvfinansierende (privatist)
01/08/1995 → 22/03/1999
Award relations: Spektral modelering af vindbølger på lavt vand
Project: PhD

Bølgenerering i fysiske og numeriske modeller
Steenberg, C. M., PhD Student, Department of Hydrodynamics and Water Resources
Jonsson, I. G., Main Supervisor, Department of Hydrodynamics and Water Resources
Brorsen, M. C., Examiner
Dalrymple, R. A., Examiner
DTU-Su Stipendium, Eksperiment
01/02/1995 → 08/09/1999
Award relations: Bølgenerering i fysiske og numeriske modeller
Project: PhD

Diffraktion af vandbølger på varierende vanddybde (ISVA)
Nielsen, S. P., PhD Student, Department of Hydrodynamics and Water Resources
Jonsson, I. G., Main Supervisor, Department of Hydrodynamics and Water Resources
Hansen, E. B., Supervisor, Department of Applied Mathematics and Computer Science
Brorsen, M. C., Examiner
Svendsen, I. A., Examiner
DTU-Su Stipendium, Eksperiment
01/08/1993 → 27/01/1997
Award relations: Diffraktion af vandbølger på varierende vanddybde (ISVA)
Project: PhD

Turbulens i brydningszonen.
Christensen, E. D., PhD Student, Department of Mechanical Engineering
Jonsson, I. G., Main Supervisor, Department of Hydrodynamics and Water Resources
Fredsoe, J., Supervisor, Department of Mechanical Engineering
Asp Hansen, E., Examiner
Jonsson, I. G., Examiner, Department of Hydrodynamics and Water Resources
Stansby, P. K., Examiner
Hansen, E. A., Examiner
DTU-Su Stipendium, Eksperiment
01/08/1993 → 06/03/1997
Award relations: Turbulens i brydningszonen.
Project: PhD

A three-dimensional second-order integral equation model for wave-current-structure interaction
This project is dedicated to numerical calculation of the interaction between waves and a current with a fixed or floating body. The numerical model will be based on an existing Boundary Integral Equation Model developed at ISVA. As something new the calculations will be in three spatial dimensions and will be made correct to second order in the wave steepness parameter
Jonsson, I. G., Project Manager, Department of Hydrodynamics and Water Resources
Buechmann, B., Project Participant, Department of Hydrodynamics and Water Resources
01/02/1996 → 31/01/1999
Project: Research
Wave generation in physical and numerical models
The primary objects of the study are the generation of waves to second order in two horizontal dimensions and waves to third order (i.e. amplitude dispersive) in one horizontal dimension
Jonsson, I. G., Project Manager, Department of Hydrodynamics and Water Resources
Steenberg, C. M., Project Participant, Department of Hydrodynamics and Water Resources
01/02/1995 → 31/12/1999
Project: Research

Wave action and wave energy fluxes
For steady waves on currents over a varying bed a connection between wave action flux and wave energy flux is sought. The result is for irrotational flow surprisingly simple, if a proper datum is chosen for flow of potential energy
Jonsson, I. G., Project Manager, Department of Hydrodynamics and Water Resources
02/01/1992 → 01/02/1998
Project: Research

Spectral modelling of water waves on finite water depth
In this PhD project the interaction between the essential physical processes that determine the water wave transformation in finite water depth is studied. Important physical processes are e.g. depth-induced wave breaking, bottom friction, wave-current interaction, and non-linear wave-wave interactions. The last of these processes is the most complicated one and is the main object of this study. In deep water the dominant non-linear process is resonant four wave interactions, and this process is included in state-of-the-art wind wave models. In shallow water the dominant non-linear process is near-resonant three wave interactions, and until very recently it was not included in any wind wave models
Jonsson, I. G., Project Manager, Department of Hydrodynamics and Water Resources
Rasmussen, J. H., Project Participant, Department of Hydrodynamics and Water Resources
01/08/1995 → 30/09/1998
Project: Research

A boundary element model for diffraction of water waves on varying water depth
A modified version of the mild slope wave equation, based upon a perturbation expansion about a fictitious water depth, is used in combination with a so-called dual reciprocity method to calculate the diffraction of water waves around an idealized island
Jonsson, I. G., Project Manager, Department of Hydrodynamics and Water Resources
Nielsen, S. P., Project Participant, Department of Hydrodynamics and Water Resources
01/08/1993 → 31/08/1996
Project: Research