

ANNE C. ELSTER – SHORT BIO



Dr. Anne C. Elster, Assoc. Professor and Director, Heterogeneous and Parallel Computing Lab (HPC-Lab), IDI Co-Director of NTNU's Computational Science and Engineering Program and current Visiting Scientist appointments at University of Texas at Austin (ICES&ECE)

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Dr. Anne C. Elster (B.Sc. UMASS 1984, M.Sc.Cornell 1988, Ph.D: Cornell (1994) is currently an Associate Professor of [Computer Science \(IDI\)](#) at the [Norwegian Univ. of Science and Technology \(NTNU\)](#) in Trondheim, [Norway](#) where she helped found their [Computational Science and Engineering Program](#) and served as Co-Director until Jan. 2007, and again since 2012. She also holds current Visiting Scientist positions at the Univ. of Texas at Austin (ECE and ICES).

She established the [IDI/NTNU HPC-Lab](#), a well-respected research lab in heterogeneous computing that regularly receives international visitors. She work very closely with her graduate students and have so far supervised over 50 masters theses, many of which have received prizes. She is currently supervising 2 Post Docs, 5 PhD students (main advisor) and is co-supervisor for 2 more PhD students as well as 6 master students.

Her current research interests are in parallel computing where she is currently focusing her research on developing good models for heterogeneous computing and parallel software environments for testing and developing parallel scientific codes that interact visually with the users by taking advantage of the powers in modern GPUs. Her research also includes parallel algorithms for novel architectures including GPUs. Her novel fast linear bit-reversal algorithm is still noteworthy. Several of her Master's students have had internships at [CERN](#), Switzerland related to [GRID computing](#).

She was one of 4 WG Leaders of [EU COST Action IC0805: Open European Network for High Performance Computing on Complex Environments](#) and help propose the ongoing EU COST Action IC 1305 where is again on the Management Committee and also serves on the Collaboration Board. Dr. Elster organized and hosted [PARA 2008](#) in May 2008, has organized several minisymposia and international panels, and serves yearly on several Program Committees, including ACM/IEEE SC, HiPC and IEEE IPDPS. Her professional memberships include IEEE (UMASS IEEE CS President 1983/4, M 1994, SM 2000), Life Member of AGU and SIAM.

Funding partners/collaborators include AMD, ARM, NVIDIA, Statoil and Schlumberger. Collaborators from Medical Technology (SINTEF) and Applied Math, Cybernetics, Marine Tech, Petroleum Engineering and Physics have had and still have several of their master students doing research in our lab. This has been of tremendous benefit for her lab, especially w.r.t. getting access to and gaining understanding of great applications. It is also very satisfying for her to see their work impacting other fields.
