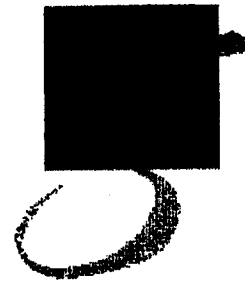MAX-PLANCK-INSTITUT
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Dear Ken,

I am writing to express my strong support for the proposed Center for Grid Application Development Software, and my intention to work closely with the participants in the proposed center as an early adopter of their technologies.

I am a practicing computational astrophysicist who realized early the promise of high-performance computing, in all of its guises, for our field. Hence, I have been engaged for the last decade in the development and application of tools designed to make the power of HPC available to my community. This work has led to the development of the widely used Cactus toolkit, among other software projects, and also to a number of record-setting computations.

More recently, I came to the realization that traditional supercomputing centers could not meet the requirements of my discipline for computational cycles but that advances in networks and microprocessor technology meant that the resources available to my community were, in the aggregate, substantially larger than those provided by traditional centers. This led me to develop both projects within my own group, and also collaborations with leading computer scientists---including participants in the GrADS project---aimed at exploiting "Grid" technologies for computational astrophysics and for computational science in general. This work has already led to some promising early results, including the development of an early "Grid-enabled" version of our Cactus Toolkit jointly with partners at the University of Chicago. We have also been successful in creating a European network of researchers in this area, and have recently obtained in excess of € 5M in funding from the European Union for our "GridLab" project, as well as more than 2MDM in German DFN-Verein funding for the TIKSL/GriKSL projects, both of which have goals similar in some respects to CGrADS.

These developments on my side make the funding of CGrADS of tremendous importance both for my own research and for my community. If GrADS is funded, I enthusiastically will commit resources from my own group in Potsdam and also from the GridLab to work directly with CGrADS researchers on problems of joint interest. I will also work,

as co-chair of the Applications Working Group of the Global Grid Forum, to bring these developing technologies into the scientific and engineering application communities as they are ready. I anticipate GridLab serving as a source of challenging applications, a testbed for CGrADS technologies, and a contributor of technologies that will complement those developed by CGrADS researchers. I also look forward to hosting CGrADS researchers at my institute.

Regards,

Prof. Edward Seidel
Max-Planck-Institut fuer Gravitationsphysik