The Birth of Mammoth
&
On the Efficient Use of Mammoth
Professors Carol Gauthier and Alain Veilleux
U. of Sherbrooke

Mammoth is the name given to the newly acquired large Linux cluster by the University of Sherbrooke as part of a grant received by the RQCHP consortium. It is composed of 1808 processors with 872 Intel Pentium4 3.2 GHz dedicated to serial computing, and 936 AMD Opteron 248 with Infiniband Interconnect dedicated to parallel computing.

The first talk, "The Birth of Mammoth" will present the history and process behind the realization of the Mammoth project, including a summary of the clustering experiences at the UdeS, the consultation process with the researchers, the benchmarks, and the difficult task of writing the Request For Proposal. Also a detailed description of the physical installation of Mammoth including the newly built computer room.

The second talk "On the efficient use of Mammoth" is about making good use of the huge computing resource provided by this cluster. The detailed architecture of Mammoth will first be presented, followed by the deployment phases including how the researchers will gain access to Mammoth. Finally, a High Level Performance Strategy will be presented, along with some new tools and tricks that will help researchers make efficient use of large HPC resources.