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The LAGUNA design study- towards giant liquid based underground detectors for neutrino physics and astrophysics and proton decay searches

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The feasibility of a next generation neutrino observatory in Europe is being considered within the LAGUNA design study. To accommodate giant neutrino detectors and shield them from cosmic rays, a new very large underground infrastructure is required. Seven potential candidate sites in different parts of Europe and at several distances from CERN are being studied: Boulby (UK), Canfranc (Spain), Fr'ejus (France/Italy), Pyh"asalmi (Finland), Polkowice-Sieroszowice (Poland), Slanic (Romania) and Umbria (Italy). The design study aims at the comprehensive and coordinated technical assessment of each site, at a coherent cost estimation, and at a prioritization of the sites within the summer 2010.

Comments: 5 pages, contribution to the Workshop "European Strategy for Future Neutrino Physics", CERN, Oct. 2009

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