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Korokhin V. V. Shkuratov Yu. G. Stankevich D. G. Kaydash V. G.
Prognosis of TiO_2 Abundance in Lunar Soil Using Clementine and LSCC Data: A Nonlinear Approach **[#1155]**
New nonlinear method for prognosis of TiO_2 abundance based on the ANN approach is proposed. The results could be useful for the strategy in analysis of lunar data obtained with spacecrafts especially for the Chandrayaan mission.

Qiao Y. Karbhari V. M. Hegemie G. A.
Developing Moonquake-Proof Structures Based on Locally Harvestable Resources **[#1039]**
Based on findings of moonquake science and lunar regolith study in the past a few decades, it is now feasible to develop technology of moonquake-proof structures using raw lunar soils.

Vago J. L. Kminek G. Baglioni P. Gardini B. McCoy D. Gianfiglio G. ExoMars Project Team
Upcoming Science Activities in Support of ESA's ExoMars Mission **[#1001]**
ExoMars 2013 is presently the only approved astrobiology mission. Its objective is to search for traces of past and present life on the Red Planet, on surface rocks and in the subsurface. This paper describes upcoming activities to further define the ExoMars mission's scientific capabilities.

Young S. M. M. Kounaves S. P. Hecht M. H. Tufts MECA-WCL Team Phoenix Science Team
Wet Chemistry Analysis of Evaporites, Red-Ox Couples, and Dissolved Sulfate on the 2007 Phoenix Mars Scout Mission **[#1084]**
The 2007 Phoenix Mars Scout lander will explore the history of martian water, the geochemistry of the regolith, and bio-habitability, using the MECA-WCL instrument, of which the design, use, and first response library samples are presented.