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Solar and Geo neutrinos

Neutrino physics continues to be a very active research field, full of open fundamental questions reaching even beyond the SM and towards possible new physics. Solar neutrinos have played a fundamental historical role in the discovery of the phenomenon of neutrino oscillations and thus non-zero neutrino mass. Even today, the study of solar neutrinos provides an important insight both into the neutrino as well as into the stellar and solar physics. Neutrino geoscience is a newly born interdisciplinary science having as its main aim determination of the Earth's radiogenic heat through measurement of antineutrinos released in the decay of long-lived radioactive elements inside the Earth (geoneutrinos). The seminar will cover the status-of-art of the present day solar and geo neutrinos physics, as well as a more detailed review of the recent results from Borexino experiment, 300 ton liquid scintillator detector placed deep underground in the Laboratori Nazionali del Gran Sasso.