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## Status of NEWS-G experiment

*Thursday, 1 June 2017 13:30 (30 minutes)*

The goal of the NEWS-G (New Experiments with Spheres filled with Gas) project is to search for galactic Dark Matter particles in the GeV mass region. Used detectors are constituted of spherical metallic vessels equipped with small ball sensors set at high voltage at center of sphere, filled with noble gas mixtures (Ar, Ne, He, H), operated in proportional mode.

Activities performed within the collaboration will be summarised : they include results from data taken with Neon target with a 60 cm diameter prototype detector in the Laboratoire Souterrain de Modane in France, R&D activities on optimisation of sensors, characterisation of gas and running conditions, calibrations scheme, quenching factor measurements, preparation of the 140 cm diameter detector to be installed in SNOLAB by 1 year.

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**Session Classification:** R3-3 Dark Matter IV (PPD) | Matière sombre IV (PPD)

**Track Classification:** Particle Physics / Physique des particules (PPD)