

Status of NEWS-G Experiment

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News Experiment With Sphere- Gaseous (NEWS-G) detector is a world wide collaboration based on spherical gas detector for Light Dark Matter search.

The first low radioactivity spherical detector, SEDINE (60 cm diameter), installed at LSM on 2012 is continuing to take data. The next detector, 140 cm in diameter, will be fabricated using remarkable ultra-low radioactivity (few microBq/kg).

This large detector will first arrive at LSM. The spherical copper vessel will undergo inner surface cleaning (to remove the radon daughter from surface) then it will be mounted at its shield, before transportation and installation at its final location at SNOLAB (for physic runs).

Status of SEDINE and its perspectives will be presented. Also, study and progress on the fabrication of the new large detector, all material selections and first design will be shown.

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