Sylvain Désert - Potential ***Industrial*** Application.

Within the SoNDe-project a neutron detector based on a solid-state scintillator is to be developed. The technology used within the SoNDe project will allow manufacturing detectors able to cope with extremely high count rates of about 20 MHz at 10% dead time on a 1 m2 detector area. Such high counting rate will be compulsory with the use of the next generation of high brilliance neutron sources such as ESS. The detectors will be composed of units of 5x5 cm2 which can be assembled at will to produce any geometry. The use of an optimized scintillator will allow an efficiency of 80% in the range 0.2 to 2 nm (0.2 to 20 meV). Also the scintillator may be changed to fit other incoming particles or wavelengths. Apart from its initial purpose for neutron science, potential industrial application of the technology will be reviewed.