Contribution ID: **64** Type: **Parallel Sessions**

The polarized deuteron source for the Van de Graaff accelerator

Tuesday, 11 September 2018 15:30 (20 minutes)

The first attempt is made to realize a polarized deuteron source suited for the Van de Graaff accelerator of Czech Technical University in Prague based on the idea of Kaminsky on channeling deuterons through a Nickel single crystal. The setup is described which contains permanent magnets with a transversal magnetic field (zero field transition) to increase the deuteron polarization up to 2/3 (in theory) using the Sona method. The preliminary results will be presented.
The final aim is to send the polarized deuterons to a tritium target for producing 14-MeV polarized neutrons which will be used
jointly with the frozen-spin polarized deuteron target for the measurement $\Delta\sigma_T$ and $\Delta\sigma_L$ in the nd transmission experiment.

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Session Classification: Polarized Ion and Lepton Sources and Targets

Track Classification: Polarized Ion and Lepton Sources and Targets