

ICANS XX,
20th meeting on Collaboration of Advanced Neutron Sources
March 4 – 9, 2012
Bariloche, Argentina

Neutron Spin Echo Instrumentation for the ESS

M.A. Sharp¹, S. Pasini², M. Monkenbusch²

¹ European Spallation Source ESS AB, Lund, Sweden

² Jülich Centre for Neutron Science, Research Centre Jülich, Germany

melissa.sharp@esss.se

Abstract

Neutron spin echo is the technique with the highest energy resolution for probing the dynamics of materials. At the European Spallation Source three different instrument concepts are currently being developed together with Research Centre Jülich and the Technical University of Munich. These are a high-resolution spin-echo spectrometer, a wide-angle spin-echo spectrometer and a combined MIEZE and neutron-resonance spinecho spectrometer. We will here present the progress made in adapting the highresolution spin-echo spectrometer to the ESS parameters. In this first step the main focus is on the specification and conceptual layout of an optimized beam transport including polarization and frame-overlap choppers. This aspect is quite common between highresolution and wide angle instrument. Further first results on the proper spin-echo part will be discussed.