Topical meeting of Spin tracking for Precision Measurements

Agenda

• May 5: 1pm—6pm

Presentations: 13:00—14:30

Chair: Ed

13:00-13:10 Mei (FZJ), Welcome and introduction

13:10-13:30 Greta(Ferrara), Overview of spin coherence time study results at COSY

13:30-13:50 Marcel(FZJ), Spin tracking with COSY-infinity and its benchmarking

13:50-14:10 Prof. Andrianov(St. Petersburg University), Spin tracking with MODE and its benchmarking

14:10-14:30 Selcuk Haciomeroglu(CAPP/IBS at KAIST), Spin tracking results with RK-Predictor-Corrector

Coffee break

Panel discussion on codes for precision measurement of storage ring based EDM search 15:00 – 18:00

Chair: Georg

- Evaluation of various codes: ~ 15mins presentations from COSY-infinity, E-Teapot, Tspink, PTC, zgoubi, BMAD, etc on its strength and limitations for EDM spin tracking
 - o Marcel: COSY-infinity
 - o Dr. Sagen: BMAD
 - o Prof. Talman: E-Teapot
 - o Dr. Abell: Tspink
 - O Dr. Meot: zgoubi
 - o M. Gaisser (CAPP/IBS at KAIST), Fast integration algorithm for spin tracking
- May 6: 1pm—3pm

Panel discussion

Chair: Vadim

- O Andreas(FZJ): Summary panel discussion on codes for EDM spin tracking
- Panel discussion on benchmarking

Coffee break

• May 6: 3:30pm – 6pm

Presentation Chair: Mei

o 15:30—16:00 Valeri(FNAL), EDM lattice design challenges and requirements

Panel discussion on lattice design tools

- O Chair: Valeri
- O Comparison of available tools:
 - MADX(CERN)
 - Optimum(FNAL)
 - BMAD(Cornell)
- Session summary: write-up by organizers by the end of June