

# **ACCELERATOR SEMINAR**

## **“Pre-Existing Betatron Motion and Spin Flipping with RF Fields in Storage Rings”**

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It seems to be a common perception that pre-existing, non-spin-resonant, vertical, betatron motion in storage rings has little influence on spin-flipping with external, resonant, radio-frequency, magnetic field. While this is often the case, care is needed, and useful insights are obtained by studying the geometry of the invariant spin field (ISF). I illustrate this by numerical means for protons in the COSY ring at Juelich in Germany and I suggest a test that could be carried out at COSY.

**Thursday, October 27, 2011  
11:00 a.m.  
CEBAF Center, Room F113**

**Coffee before seminar at 10:45 a.m.**