# (Preliminary) Program Joint JCNS Workshop & Flipper 2016

# Tuesday, 4 October

# Nanomagnetism I (Molecular Magnets & Nanoparticles)

09:10	Lescouezec	Molecular Magnetic Materials: Probing Magnetism at the local scale
09:40	Guidi	Antiferromagnetic molecular rings: spin density and dynamics
10:10	Petracic	Magnetic and structural order in self-assembled 2d and 3d nanoparticle supercrystals
10:30	Feygenson	Exchange bias effect in Au-Fe3O4 dumbbell nanoparticles induced by the charge transfer from gold

### **Functional Materials I**

11:20	Van Dijk	Neutron scattering studies on Fe2P-based magnetocaloric materials
11:50	Friese	Multiparametric studies on magnetocaloric compounds in the system Mn5-xFexSi3
12:20	Stewart	Static correlated spin fluctuations in single crystal Fe65Ni35 INVAR alloy, studied using small-angle neutron scattering with polarization analysis
12:40	Fu	Magnetic structures and magnetoelastic coupling of Fe-doped hexagonal manganites $LuMn_{1-x}Fe_xO_3$ ( $0 \le x \le 0.3$

### **Unconventional Superconductors I**

14:30	Boothroyd	Evidence for charge stripe correlations in the layered cobaltate La5/3Sr1/3CoO4
15:00	Jin	Magnetism in Eu(Fe1-xIrx)2As2 Iron Pnictides Studied by Complementary Scattering Methods
15:20	Demirdis	SANS Study of Vortex Lattice Structure in Iron-Based Superconductors
15:40	Cermak	Magnetoelastic hybrid excitations in non-centrosymmetric heavy fermion compound CeAuAl3

# Wednesday, 5 October

# **Quantum / Frustrated Spin Systems I**

09:00	Gegenwart	Frustrated quantum magnets with large spin-orbit coupling
09:30	Feng	Neutron scattering investigation of rare earth pyrochlore iridates
09:50	Chang	Low temperature magnetic properties of Yb2Ti2O7
10:20	Pecanha- Antonio	Neutron Scattering Studies on Yb2Ti2O7 powder

### Nanomagnetism II (Films)

11:20	Temst	Exchange bias in thin Co-CoO films: inner secrets revealed by unpolarized neutron reflectivity
11:50	Glavic	Complex Magnetism in Manganite Heterostructures Probed with Polarized Neutrons
12:10	Syed Mohd	Connecting MARIA with an MBE setup: first (quasi) in-situ neutron reflectivity measurements on thin films

# Thursday, 6 October

#### **Neutron Methods and instrumentation I**

09:00	Boeni	Instrumentation with Polarized Neutrons
09:30	Hutanu (POLI)	tbd
09:50	Schmidt (IN12)	Polarization analysis on the new IN12
10:10	Schweika (MAGiC)	MAGiC – the polarized single crystal diffractometer at the ESS
10:30	Mattauch (MARIA)	MARIA - The high-intensity polarized neutron reflectometer of JCNS

# **Functional Materials II (Multiferroics)**

11:20	Angst	tbd
11:50	Sazonov	Magnetic structure and magnetic domain population in multiferroic Ba <sub>2</sub> CoGe <sub>2</sub> O <sub>7</sub> by polarized neutron diffraction
12:10	Zobkalo	On the antisymmetric exchange in TbMn2O5 by polarized neutron diffraction

# **Quantum/Frustrated Spin Systems II**

14:30	Gao	Spiral spin liquid in MnSc2S4
15:00	Balz	Physical realization of a new quantum spin liquid based on a novel frustration mechanism
15:30	Weber	Field-dependence of the helimagnon dispersion in the chiral magnet MnSi

# **Unconventional Superconductors II**

16:40	Raymond	Ising incommensurate Spin Resonance of CeCoIn5: A dynamical precursor of the Q-phase
17:10	Park	Transition from sign-reversed to sign-preserved Cooper-pairing symmetry in sulfur-doped iron selenide superconductors
17:30	T. Keller	Magnetostriction and magnetostructural domains in antiferromagnetic YBa2Cu3O6

# Friday, 7 October

#### **Neutron Methods and Instrumentation II**

09:00	Goukassov	Area Detectors for Single-Crystal Neutron Diffraction
09:30	Babcock	Latest results of practical testing of PASTIS with a TOF beamline
09:50	Nemkovskiy	Simulation and optimization of a new focusing polarizing bender for the diffuse neutron scattering spectrometer DNS@MLZ
10:10	Sadykov	Nonmagnetic high pressure clamp cells for neutron scattering at low temperature and high magnetic fields.
10:30	Burgoyne	Cryogen-free high magnetic field and low temperature sample environments for neutron scattering - latest developments

# **Functional Materials III (Multiferroics)**

11:20	Rodriguez- Velamazan	Magnetic interactions and magneto-electric coupling mechanisms in iron penta-halide hybrid compounds
11:50	Xiao	Spin-wave and electromagnon dispersions in multiferroic MnWO4 as observed by neutron spectroscopy
12:10	Kousaka	Homo-chiral crystal growth and chiral helimagnetism in CsCuCl3

#### **Posters**

#### 2016-1

Kirill Nemkovskiy, JCNS at MLZ, Forschungszentrum Jülich, Germany

Recent developments at DNS, diffuse neutron scattering spectrometer with polarization analysis at MLZ

#### 2016-2

Artem Feoktystov, JCNS at MLZ, Forschungszentrum Jülich, Germany

**Upgrade of the KWS-1 Small-Angle Neutron Scattering Instrument** 

#### 2016-3

Henrik Thoma, RWTH Aachen University and JCNS at MLZ, Germany

New setup for polarized neutron diffraction at instrument POLI at MLZ

#### 2016-4

Martin Meven, RWTH Aachen University and JCNS at MLZ, Forschungszentrum Jülich, Germany Studies on new magnetic and superconducting compounds with Hot Single Crystal Diffraction on HEiDi

#### 2016-5

Jörg Voigt, JCNS-2 and PGI-4, Forschungszentrum Jülich, Germany

T-REX: a bispectral direct geometry chopper spectrometer at the ESS

#### 2016-6

Liming Wang, JCNS-2 and PGI-4, Forschungszentrum Jülich, Germany

Strain and electric field control of magnetism in supercrystalline iron oxide nanoparticle - BaTiO<sub>3</sub> composites

#### 2016-7

Michael Smik, JCNS-2 and PGI-4, Forschungszentrum Jülich, Germany

Structural and magnetic properties of self-assembled 3D nanoparticle macrocrystals

#### 2016-8

Artur Glavic, Paul Scherrer Institut, Switzerland

The Polarized Small Sample Reflectometer Estia at ESS