PROGRAMME

Day-0	Sunday	10th Feb. 2019
16:00 – 18:00	**Registration**	
18:00 – 20:30	**Welcome reception**	

Day-1	Monday 11th Feb. 2019
9:00 – 9:30	**INAUGURATION**
9:30 – 10:00	**Official Opening of HYPERFINE 2019**
10:00 – 10:30	**TEA/COFFEE BREAK**
	Session Chair: Guido Langouche
10:30 – 11:05 (30+5)	I-1 Stephen Blundell The muon site and DFT+μ
11:05 – 11:40 (30+5)	I-2 Zaher Salman A local spin probe perspective of topological materials
11:40 –11:55	O-1 Anu Gupta Evidence of short-range magnetic order in undoped and Co-doped Bi_2Se_3 nanoplates
11:55 – 12:10	O-2 R. Sarkar Local nematic susceptibility in stressed/strained $BaFe_2As_2$ from NMR measurements
12:10 – 12:45	**PECHA KUCHA-1**
	PK1 Gregory Furman Robust solid-state qubits based on NQR technique
	PK2 M Manjunatha Determination of phase purity of ferromagnetic iron particles using ^{57}Fe- Internal Field Nuclear Magnetic Resonance
	PK3 K. Bharuth-Ram Identification of Fe_3C nanoparticles in Fe implanted graphite and CVD diamond
12:45 – 14:00	**LUNCH BREAK**
	Session Chair: Prof. H. Haas
14:00 – 14:35 (30+5)	I-3 Jun Sugiyama Spin polarized beam for battery materials analysis: μSR and beta-NMR
14:35 –15:10	I-4 Thomas Prokscha μSR opportunities at the Swiss Muon Source SμS + O-3 Hole carrier profiles at the surface of p-type Ge measured by low-energy muon spin spectroscopy
15:10 –15:25	O-4 Sven Velten Hyperfine interactions in ultra-thin β-Sn layers probed via nuclear resonance scattering
15:25 – 15:40	O-5 Zaineb Hussain ^{57}Fe Mössbauer and MOKE study of unidirectional anisotropy in FePt/Fe bilayers
15:40 –16:00	**TEA/COFFEE**
16:00 – 18:00	**POSTER (Session-1)** **PA(1-4), PB(1-10), PC(1-7), PD(1-35)**

Day-2	Tuesday	12th Feb. 20019
	Session Chair: Ralf Röhlsberger	
9:00 – 9:35 (30+5)	I-5 Ruben De Groote High-resolution, high-sensitivity laser spectroscopy measurements for nuclear structure research	
9:35 – 10:10 (30+5)	I-6 Andrew E. Stuchbery Nuclear g factors and the renaissance of the recoil in vacuum method	
10:10 – 10:25	O-6 G. Georgiev Time Dependent Recoil in Vacuum measurements on radioactive ions	
10:25 – 11:00	**Tea/Coffee Break**	
	Session Chair: L.M. C. Pereria	
11:00 – 11:15	O-7 Lutz Schweikhard MIRACLS: Increasing the Sensitivity of Collinear Laser Spectroscopy by Multiple Reflection of Ion Beams	
11:15 – 11:30	O-8 Md. S. R. Laskar *g*-factor of $11/2^-$ isomeric state in ^{133}La	
11:30 – 11:45	O-9 Kensaku Matsuta Homogeneous Magnetic Field for the neutron Electric Dipole Moment (n-EDM) Measurement using Ultra-cold Neutrons	
11:45 – 12:15	I-7 Radomira Lozeva "gSPEC"	
12:15 – 12:30	O-10 Kanika The ARTEMIS experiment for precision measurements of the electron g-factor in highly charged ions	
12:30 – 12:45	O-11 J. N. Orce "Solving shape conundra at iThemba LABS and HIE-ISOLDE"	
12:45 – 14:00	**LUNCH BREAK**	
	Session Chair: H. Akai	
14:00 – 14:30	I-8 Dimiter L Balabanski Status of ELI-NP and opportunities for hyperfine research	
14:30 – 14:45	O-12 Jasmeet Kaur "Nuclearstructure studies by photofission at ELI-NP"	
14:45 – 15:00	O-13 M. Mihara "Beta-NMR of short-lived nucleus ^{17}N in liquids"	
	PECHA KUCHA-2	
15:00 – 15:30	PK4 S. S. Alam Measurement of Electric Quadupole moment in neutron rich ^{131,132}I by Perturbed γ–γ Angular Correlation Spectroscopy and Theoretical Calculations PK5 Archana Saxena A*b initio* description of collectivity for *sd* shell nuclei PK6 Brajesh Kumar Mani High Precision Atomic Properties Calculations using Relativistic Coupled-Cluster Theory	
15:30 – 16:00	I-9 R. Palit Overview of facilities in India for nuclear spectroscopy and moment measurements	
16:00 – 16:15	Pascal QUIRIN Innovative HPGe Detectors for Research Applications	
16:15 – 16:45	**TEA/COFFEE BREAK**	
	Evening Talk	
17:00 – 18:00	**Stefaan Cottenier "Turtles: food for thought for our conference dinner"**	
	CONFERENCE BANQUET	

Day-3:	**Wednesday**	**13th Feb. 2019**
	Session Chair: Rodemira Lozeva	
9:00 – 9:35 (30+5)	I-10 Deyan T. Yordanov Recent highlights from collinear laser spectroscopy in the Z=50 region	
9:35 – 10.05	I-11 Y. Ichikawa Nuclear magnetic dipole moments measured with spin-oriented RI beams at RIKEN RIBF	
10:05 – 10:35	**PECHA KUCHA-3**	
	PK7 Mukul Gupta Magnetism of ultra-thin FeN films probed by nuclear resonant scattering PK8 Prabhat Kumar Magnetic Properties of Ultrathin Fe-C Thin Films Studied using Nuclear Resonance Scattering PK9 Poonam Yadav Frustration driven incommensurate charge and spin density waves in $SrMn_{1-x}W_xO_3$: An effect of W doping	
10:35 – 11:05	**TEA/COFFEE BREAK**	
11:05 – 11:40 (30+5)	I-12 Jeffrey Hangst Spectroscopy of Antihydrogen	
11:45 – 12:30	**IAC meeting**	
12:00 – 13:00	**LUNCH**	
13:00 – 18:00	**Conference Excursion**	
19:30 – 21:30	**Dinner at ICG after returning**	

Day-4	Thursday 14th Feb. 2019
	Session Chair: Stephen Blundell
9:00 – 9:35 (30+5)	I-13 Ralf Röhlsberger Determination of hyperfine interactions via high-purity polarimetry
9:35 – 10:10 (30+5)	I-14 Heinz Haas First PAC measurements on free molecules - the Cd and Hg halides
10:10 – 10:25	O-14 L. M. C. Pereira Locally probing adatoms on graphene using perturbed angular correlation spectroscopy
10:25 – 10:40	O-15 G. Marschick PAC studies on the alpha-beta phase transition in multiferroic bismuth ferrite
10:40 – 11:10	**TEA/COFFEE BREAK**
	Session Chair: R. Vianden
11:10 – 11:25	O-17 I. T. Matos Investigation of magnetic and structural properties of $CoFe_2O_4$ nanoparticles by measuring hyperfine interactions with ^{111}Cd
11:25 – 11:40	O-18 D. A. Salamatin Two-stage pressure-induced Yb valence change in the hexagonal Laves phase $YbAg_2$: investigation by ^{111}Cd-TDPAC up to 19 GPa
11:40 – 11:55	O-19 L. Hemmingsen Perturbed angular correlation (PAC) of γ-rays spectroscopy applied to protein metal sites
11:55 – 12:10	O-20 Matthew O. Zacate Modified Embedded-Atom Method Potential for Cadmium
12:10 – 12:25	O-21 R. N. Saxena Magnetic Hyperfine Field at ^{119}Sn and ^{111}Cd probes in Gd_5Ge_4 Studied by Mössbauer and PAC Spectroscopy
12:25 – 14:00	**LUNCH BREAK**
14:00 – 14:30	**Chair: C. C. Dey** **PECHA KUCHA-4**
	PK10 S.K. Mohanta High temperature ferromagnetism in $NbCo_2$ nanoparticles – bulk magnetization and hyperfine field measurements PK11 S.K. Dey "Component phases and local electric field gradient in Zr7Ni10" PK12 Germán N. Darriba Reconstruction and modeling of pure and Cd-doped (111) In surface: *Ab Initio* study of structural, electronic, and hyperfine properties at and near the surface.
14:30 – 15:00	I-15 Karl Johnston "Hyperfine studies at the ISOLDE facility, CERN"
15:00 – 15:30	**PECHA KUCHA-5**
	PK13 M Manjunatha Determination of phase purity of ferromagnetic iron particles using ^{57}Fe- Internal Field Nuclear Magnetic Resonance PK14 Avinash Ganesh Khanderao Interface resolved nuclear forward scattering of Fe/57Fe/Alq3 bilayers: study of hyperfine field and Fe moments orientation at the interface PK15 Sadhana Singh Origin of in-plane exchange bias in [Co/Pt]ML/Fe multilayer with orthogonal magnetic anisotropies: A depth resolved study using Nuclear Resonance Scattering
15:30 – 16:00	**TEA/COFFEE BREAK**
16:00 – 18:00	**POSTER (Session 2)** **PD(37-45), PE(1-5), PF(1-3), PG(2-7), PH(2-6), PJ(1-4), PK(2-7), PL-02, PM(1-4)**

Day-5	**Friday**	**15th Feb. 2019**
	Session Chair: K. Bharuth-Ram	
9:00 – 9:35 (30+5)	INV-16 Wilfried Nörtershäuser Rise and Fall of the Hyperfine Puzzle of Strong-Field QED	
9:35 – 10:05	INV-17 Yoshitaka Yoda Latest research using nuclear resonant scattering at SPring-8	
	Oral Presentations	
10:05 – 10:20	O-22 Kimara Naicker Measuring Hyperfine Fields in BBFO employing Mössbauer Spectroscopy	
10:20 – 10:40	O-23 Ganesh Bera ^{57}Fe Mössbauer Spectroscopy Study in $Fe_{1-x}Cr_xVO_4$ – A Type-II multiferroic Materials	
10:40 – 11:10	**TEA/COFFEE BREAK**	
	Session Chair: K.R. Priolkar	
11:10 – 11:25	O-24 J.-M. R. Génin The ordering of anions in interlayers that matches the Fe^{III} ions order in layers of Fe^{II-III} hydroxysalts (Green Rusts)	
11:25 – 11:40	O-25 J. Cieslak Mossbauer investigations of FeCrNiCo-based high entropy alloys	
11:40 – 11:55	O-26 M.I. Oshtrakh Comparison of the ^{57}Fe Hyperfine Interactions in Silicate Phases in Sariçiçek Howardite and Some Ordinary Chondrites	
11:55 – 12:10	O-27 Michael Reissner Using ^{57}Fe Mössbauer spectroscopy to study the pivotal role of tetrahedrally coordinated Fe in the radical generation by, and dissolution mechanisms of, chrysotile asbestos fibers	
12:10 – 12:25	**Presentation from the host of the next conference**	
12:25 – 12:45	**Closing Remark**	
12:45 – 12:55	**End of the Conference**	
13:10 – 14:00	**LUNCH**	