



EUSpec Training School on Multiple Scattering

Codes : 27-30 June 2016

- 1st day : theory courses on multiple scattering



8h15 - 8h45	Registration (R. Römling-Engl)
8h45 - 9h00	Welcome of the participants (D. Sébilleau and H. Ebert)
9h00 - 9h45	D. Sébilleau (Rennes) : <i>Introduction to (multiple) scattering theory</i>
9h45 - 10h30	M. Benfatto (Frascati) : « Multiple scattering for X-ray absorption »
10h30 - 11h00	Coffee break
11h00 - 11h45	K. Hatada (Rennes) : « Full potential multiple scattering + ES2MS code»
11h45 - 12h30	C. R. Natoli : « Computing the potential : the phagen_scf code »
12h30 - 13h30	Lunch break
13h30 - 14h15	O. Šipr (Prague) : <i>DMFT and multiple scattering theory</i>
14h15 - 15h00	H. Ebert/Jan Minár (Munich) : « Multiple scattering for electronic structure»
15h00 - 15h45	A. Di Cicco (Camerino) : « <i>N-body expansions in multiple scattering</i> »
15h45 - 16h15	Coffee break + posters installation
16h15 - 17h00	P. Krüger (Chiba) : « Multichannel multiple scattering »
17h00 - 17h45	A. Taranukhina (Rostov) : « Multichannel multiple scattering in Green's function formalism »

- days 2-4 : training on the computer codes : MXAN (Frascati), GNXAS (Camerino), MsSpec (Rennes), FPMS (Rennes), MCMS (Chiba)

	Tuesday the 28th June 2016	Wednesday the 29th June 2016	Thursday the 30th June 2016	
8h30-10h30	Hands-on MXAN -1 : M.Benfatto/E. Pace	Hands-on MsSpec -1 : D. Sébilleau/T. Jaouen	Hands-on MCMS -1 : P. Krüger/A. Koide	WG2-WG5 meeting (organised by B. Brena and M. Pedio)
10h30-11h00	Coffee break/posters	Coffee break/posters	Coffee break/posters	
11h00-12h30	Hands-on MXAN -2 : M.Benfatto/E. Pace	Hands-on MsSpec -2: D. Sébilleau/T. Jaouen	Hands-on MCMS -2: P. Krüger/A. Koide	
12h30-13h30	Lunch break	Lunch break	Lunch break	
13h30-15h30	Hands-on GNXAS -1 : A. Di Cicco/M. Minicucci	Hands-on FPMS -1 : K. Hatada/A. Koide	Hands-on : MXAN, GNXAS, MsSpec, FPMS, MCMS	EUSpec management committee meeting
15h30-16h00	Coffee break/posters	Coffee break/posters	Coffee break/posters	
16h00-17h30	Hands-on GNXAS-2: A. Di Cicco/ M. Minicucci	Hands-on FPMS -2 : K. Hatada/A. Koide	Poster session	
17h30-18h30	Local beers tasting session	Visit of <i>Parlement de Bretagne</i> at 17h30	Conclusion	
19h00-22h30		Workshop dinner	Reception at the Town Hall at 18:30	

MSNano conference:

- 1st day : Friday the 1st of July 2016: **4th MSNano workshop**

Time	Talk	Session/Chair
8h00 - 8h30	Registration	
8h30 - 8h45	Welcome (D. Sébilleau, H. Ebert) Obituaries : W. Temmerman (H. Ebert), Z. Wu (A. Marcelli)	
8h45 - 9h10	M. Cammarata : <i>Time resolved X-ray absorption Experiments (6 to 18 keV) at Synchrotrons and Free Electron Lasers</i>	Time-resolved/K. Hatada
9h10 - 9h35	A. Di Cicco : <i>X-ray absorption with free electron lasers: first results at Fermi@Elettra</i>	Time-resolved/K. Hatada
9h35 - 10h00	O. Šipr : <i>Full-potential polarized XANES calculation by combining pseudopotential and multiple-scattering methods: A poor-man's solution</i>	SPR-KKR/A. Gellé
10h00 - 10h25	H. Ebert : <i>Inclusion of temperature effects in the calculations of response properties</i>	SPR-KKR/A. Gellé
10h25 - 10h40	Coffee break	
10h40 - 11h05	C. R. Natoli :	Multichannel/H. Ebert
11h05 - 11h30	P. Krüger : <i>L-edge absorption and dichroism in low symmetry (d0) compounds</i>	Multichannel/H. Ebert
11h30 - 11h55	A. Taranukhina :	Multichannel/H. Ebert
11h55 - 12h50	Lunch break	
12h50 - 13h15	P. Turban : <i>Ballistic Electron Emission Microscopy : hot-electrons for probing interface electronic properties at the nanoscale</i>	BEEM/T. Fujikawa
13h15 - 13h40	K. Hatada : <i>Multiple scattering theory of BEEM in real space</i>	BEEM/T. Fujikawa
13h40 - 14h05	C. Godet : <i>Photoelectron energy loss spectroscopy : retrieving the Energy Loss Function from XPS experiments</i>	Plasmons/P. Krüger
14h05 - 14h30	T. Fujikawa : <i>Plasmon losses in core photoemission spectra</i>	Plasmons/P. Krüger
14h30 - 14h55	J. Minár/K. Hatada/N. Komiya : <i>The ESL library / The ES2MS package</i>	Data format/P. Krüger
14h55 - 15h10	Coffee break	
15h10 - 15h35	D. Sébilleau : <i>A complete multiple scattering approach to EELS</i>	MsSpec/C. Natoli
15h35 - 16h00	R. Choubisa : « MS theory of (e ⁻ ,2e ⁻) spectroscopy »	MsSpec/C. Natoli
16h00 - 16h25	T. Jaouen: <i>Layer-resolved Auger electron diffraction study of Mg atom incorporation at MgO / Ag(001) interface</i>	MsSpec/C. Natoli
16h25 - 16h50	W. Chu: <i>Structure-property relationship of nanomaterials for the energy storage and conversion studied by XAS and MS calculations</i>	Varia/D. Sébilleau
16h50 - 17h15	C. Zou : <i>The electronic and structural transitions studies of VO₂ epitaxial film by X-ray diffraction and polarized X-ray absorption spectroscopy</i>	Varia/D. Sébilleau
17h15 - 17h40	T. Miyanaga : <i>XAFS study on luminescent Ag-zeolites</i>	Varia/D. Sébilleau
17h40 - 18h40	Round table: <i>How to extend the ideas of the MSNano network and federate multiple scattering at European level?</i>	Varia/D. Sébilleau and H. Ebert
18h40 - 19h00	Conclusion (D. Sébilleau, H. Ebert)	

- 2nd day : Saturday the 2nd of July 2016: **A tribute to Rino Natoli for his 75th birthday**

Time	Talk	Chair
8h30 - 9h00	Welcome (D. Sébilleau, A. Di Cicco)	
9h00 - 9h30	F. Palumbo (Frascati) :	C. S. Fadley
9h30 - 9h45	R. Gunnella (Camerino) : <i>Surfaces: structure and soul chez Rino</i>	C. S. Fadley
9h45 - 10h00	K. Hatada (Rennes) : <i>Revolutionary, Innovative, Novel, Outstanding</i>	C. S. Fadley
10h00 - 10h15	S. Di Matteo (Rennes) : <i>Learning from Rino: Sum-Rules, V₂O₃ & Latino</i>	C. S. Fadley
10h15 - 10h30	D. Foulis (Grenoble) :	C. S. Fadley
10h30 - 10h45	A. Taranukhina (Rostov on Don) : <i>Multi-aqueduct approach to the interaction with Rino Natoli</i>	C. S. Fadley
10h45 - 11h00	Coffee break	
11h00 - 11h15	P. Krüger (Chiba) : <i>All channels lead to Frascati</i>	J. J. Rehr
11h15 - 11h30	N. Perkins (Minneapolis) : <i>Mott physics with spin-orbit coupling and orbital degeneracy: how the ideas on V₂O₃ lead to the development of a new field in 21st century</i>	J. J. Rehr
11h30 - 11h45	Y. Joly (Grenoble) : <i>Fun with Resonant Diffraction</i>	J. J. Rehr
11h45 - 12h00	C. Brouder (Paris) : <i>Relativistic effects and gauge invariance in x-ray spectroscopy and scattering</i>	J. J. Rehr
12h00 - 12h15	Video messages : K. Hayakawa (Frascati), D. Cabaret (Paris), F. Da Pieve (Brussels)	J. J. Rehr
12h15 - 13h30	Lunch break	
13h30 - 14h00	C. S. Fadley (Berkeley) : <i>Some new developments in the study of bulk materials and buried interfaces with photoemission, and some challenges for theory</i>	N. Perkins
14h00 - 14h30	J. J. Rehr (Seattle) : <i>Theory of inelastic losses and satellites in x-ray spectra</i>	N. Perkins
14h30 - 15h00	M. A. Van Hove (Hong-Kong) : <i>Large molecules on metal surfaces: from C₆₀ to molecular motors</i>	N. Perkins
15h00 - 15h30	H. Daimon (Nara) : <i>3D atomic structure analysis around local active atoms by two-dimensional photoelectron diffraction and holography</i>	N. Perkins
15h30 - 15h45	Coffee break	
15h45 - 16h00	H. Ebert (Münich) : <i>Relativistic multiple scattering calculations in the full-potential mode</i>	M. A. Van Hove
16h00 - 16h15	R. Zeller (Jülich) : <i>Precise large-scale density-functional calculations</i>	M. A. Van Hove
16h15 - 16h30	P. Sainctavit (Paris): <i>Quantum tunnelling of magnetization and Single Molecule Magnets</i>	M. A. Van Hove
16h30 - 16h45	A. Marcelli (Frascati) : <i>From the MS ideas to the experimental determination of a three-body correlation function using XAS</i>	M. A. Van Hove
16h45 - 17h00	G. Stefanil (Rome) : <i>Do pairs of electrons diffract as a whole</i>	M. A. Van Hove
17h00 - 17h15	O. Šipr (Prague) : <i>Influence of spin-orbit coupling on the magnetic dipole term Tz</i>	H. Daimon
17h15 - 17h30	J. García (Saragosse) : <i>Local Geometry by XAS and RXS</i>	H. Daimon
17h30 - 17h45	T. Fujikawa (Chiba) : <i>Theory of pump-probe ultrafast XPS</i>	H. Daimon
17h45 - 18h00	M. Pedio (Trieste) : <i>Full Multiple Scattering applied to XAS of molecular solids</i>	H. Daimon

18h00 - 18h15	J. Minár (Munich/Plzeň) : <i>Multiple scattering meets correlations</i>	H. Daimon
18h15 - 18h30	Conclusion : C. R. Natoli	
19h30 - 23h30	Conference dinner	