



Provisionnal program

2nd Workshop " Combined Analysis Using X-ray and Neutron Scattering "

July 4-8, 2011, Caen (France)

Monday	Tuesday	Wednesday	Thursday	Friday
	9h Classical Rietveld Analysis Rietveld method in brief The Ph(y) parameter of the problematic texture in Rievel Microstructural aspect of the profile How the deconvolution operates Le Bail extraction NL Least squares, genetic and simulated annealing	9h Line Broadening Analysis Line broadening due to size and microstrains Williamson-Hall, Bertaut-Warren-Averbach, Popa ... Size and microstrain distributions	9h Residual Stress Analysis Calculation of residual stress Characterization of macrostress Study of 2nd and 3rd order stresses Anisotropy of lattice strain response	9h The combined solution Algorithm Examples
~10h30 / 11h : coffe break				
10h Welcome	Classical Crystallographic Texture Analysis Quantitative Texture Analysis, measurements / Corrections Direct Pole Figures, normalisation, inverse pole figures, ODF Resolution methods	X-ray reflectivity Analysis Specular reflectivity Fresnel, Parratt Formalisms Roughness Correlation functions	Phase Analysis Crystalline, amorphous Applications	Whole Pattern from images Evaluation of the formation
~12h30 / 14h : Lunch				
Introduction Fundamental aspect Technical description	Practical session Use of the MAUD software	Practical session Use of the MAUD software	Practical session Use of the MAUD software	
~15h30 / 16h : coffe break				
Classical Rietveld Analysis Rietveld method in brief The Ph(y) parameter of the problematic texture in Rievel Microstructural aspect of the profile How the deconvolution operates Le Bail extraction NL Least squares, genetic and simulated annealing	Practical session Use of the MAUD software	Practical session Use of the MAUD software	Practical session Use of the MAUD software	
~18h End of the day				
	~19h Dinner		~19h Dinner	