

## Provisionnal program

1st Workshop "Combined Analysis Using X-ray and Neutron Scattering"

June 28<sup>th</sup> – July 2<sup>nd</sup>, 2010,Caen (France)

Monday	Tuesday	Wednesday	Thursday	Friday
	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	<b>Phase Analysis</b> Crystalline, amorphous Applications	Whole Pattern from images
~10h30 / 11h : coffe break				
10h Welcome	Line Broadening Analysis Line broadening due to size and microstrains Williamson-Hall, Bertaut-Warren- Averbach, Popa Size and microstrain distributions	<b>Residual Stress Analysis</b> Calculation of residual stress Characterization of macrostress Study of 2nd and 3rd order stresse Anisotropy of lattice strain response	<b>The combined solution</b> Algorithm Examples	Examples using MAUD Evaluation of the formation
~12h30 / 14h : Lunch				
<b>Introduction</b> Fundamental aspect Technical description	<b>Practical session</b> Use of the MAUD software	<b>Practical session</b> Use of the MAUD software	<b>Practical session</b> 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 Rieveld Microstructural aspect of the profile How the deconvolution operates Le Bail extraction NL Least squares, genetic and simulated annealing	<b>Practical session</b> Use of the MAUD software	<b>Practical session</b> Use of the MAUD software	<b>Practical session</b> Use of the MAUD software	
~18h End of the day				
	~19h Dinner		~19h Dinner	