



## Provisionnal program

### 3<sup>rd</sup> Workshop " Combined Analysis Using X-ray and Neutron Scattering "

July 8-12, 2013, Caen (France)



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