Mr. Andrea PALLAVICINI, (Head of Equity, FX and Commodity Models, Banca IMI, Milano, IT) will present a seminar entitled:

"Numerical Methods for FX Derivative Pricing"

Abstract:

Foreign exchange markets actively trade call/put and barrier options on many currency pairs along with more exotic products. Stochastic local volatility models became in the last years a common pricing tool in these markets, since such models are able to calibrate barrier quotes along with the call/put volatilities. These models naturally lead either to the numerical solution of parabolic PDEs, in one or two spatial dimensions, or alternatively to Monte Carlo simulations. Here, we focus on a simplified setting to discuss how to accelerate these algorithms by means of fixed-point and quantization techniques.