

Temperature and stochasticity in PDE model numerics for  
Bose Einstein Condensates

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**Abstract :** We present ongoing work with J.-F. Mennemann on numerics for experiments for Bose Einstein Condensates with "classical", aka "mean field" models based on a cubic NLS called Gross Pitaevskii equation. Particular focus is given of the role of "stochasticity" for "nonzero temperature", where both "stochastic" NLS (with "white noise" as a term in the PDE) and "truncated Wigner approach" (with "randomness" in the initial data of deterministic PDE) are used, and on "free flight" simulations after the confining trap is opened.