Prescribed norm solutions for some classes of nonlinear Schrödinger equations

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Abstract: In this talk we shall be interested in solutions of nonlinear Schrödinger equations having a given L^2 norm. We shall deal both with *mass-subcritical* and *mass-supercritical* situations. We consider, in particular, the issues of the existence of a ground state and the multiplicity of non-radial sign-changing solutions. This talk is based on two joint papers with professor Louis Jeanjean.