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# Some concentration phenomena in elliptic partial differential equations

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### Abstract

This talk is about concentration phenomena that have been widely studied in the field of elliptic Partial Differential Equations (PDEs) during the last decades. The problems presented involve the nonlinear equations of Lane-Emden, Hénon and Schrödinger. Results of existence and asymptotic behavior of the solutions that were obtained in some collaborations are shown. In addition, without going into technical details, some of the main Nonlinear Analysis tools that have been used to study these phenomena in the previously mentioned nonlinear PDEs are highlighted.

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