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Title: Elastic compact objects in general relativity

Abstract: In this talk we will introduce a new framework to study spherically symmetric self-gravitating elastic bodies in general relativity. Using this newly found formalism we will show that spherically symmetric configurations can be built and we will discuss the viability of such solutions. We will show that elastic matter can produce more massive and more compact solutions than their fluid analogous and we will discuss how compact can a viable elastic compact object be.