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Type: **Plenary talk**

Review on dark matter models (heavy & light)

Wednesday 30 August 2023 09:00 (30 minutes)

Dark Matter constitutes more than 80% of the total amount of matter in the Universe: we know it exists, we can guess some of its properties, but we have no idea of what it actually is. This is humbling and it constitutes one of the most pressing issues in cosmology and particle physics today. Notoriously, the range of masses for possible candidates to the role of Dark Matter covers more than 80 orders of magnitude. Even limiting only to elementary particles, the range is huge: looking for an axion or a WIMP is like being an explorer and setting off to search for something that can have the size of an atom or of a continent.

We will review quickly the main ideas behind this huge variety and focus on some specific cases.

Submitted on behalf of a Collaboration?

No

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