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Abstract content
 (Max 300 words)
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Since the discovery of the Higgs boson, particle physics now has a complete theory to describe the material world that surrounds us: everything on Earth and in all stars and galaxies. But all this visible matter only accounts for 5 % of the content of the Universe. The rest is called dark matter and dark energy but it remains completely mysterious. This is the biggest challenge in particle physics today. I will first explain the current theoretical model used in particle physics, then review the evidence for the existence of dark matter coming from astronomy and cosmology, and finally talk about the various ongoing physics experiments attempting to detect it on Earth, deep at the bottom of mines as well as on-board the International Space Station. This will be an opportunity to understand the recent discoveries in particle physics and to explore the dark side of the Universe, where two infinities meet.