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## **Doughnuts in space - Extra dimensions and their consequences**

*Monday 7 April 2014 11:15 (20 minutes)*

### **Summary**

The Standard Model of particle physics is very successful, but it still leaves a lot of open questions. Extra Dimensions can address several of these questions, while linking particle physics and cosmology. Recently, novel methods of stabilizing these extra dimensions have become available. Therefore, they are becoming more and more interesting in theoretical physics. I will present the basics of physics in more than four dimensions in an elementary way and explain how they can elegantly address open issues in GUT extensions of the Standard Model but also show challenges in the implementation of a realistic extra-dimensional model.

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