

## From Torsion to n-sections and Pati-Salam to the Standard Model in F-theory

*Monday 16 March 2015 14:40 (20 minutes)*

We give an overview on all F-theory fibrations with the 16 classical 2D polytopes as the fiber. We find examples of Mordell-Weil torsion and discrete symmetries observe a possible connection by mirror symmetry. In the second part of the talk we complete one of the fibrations to a full four dimensional theory possessing exact Pati-Salam symmetry group with three chiral families and break it down to the Standard Model.

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