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29. April 2014, 16:15 in room 0.8.0.53

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## What is ... the Euler Characteristic? From primary school to the Fields Medal

$$\chi \left( \begin{array}{c} \text{Diagram of a planar graph with 10 vertices and 15 edges} \end{array} \right) = 2$$

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A talk by Matthias Ludewig

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You can have school children discover that the Euler characteristic of a planar graph is always two. The Euler characteristic is also an ingredient of one of the most important theorems in contemporary mathematics, the Atiyah-Singer index theorem. Learn what the Euler characteristic is and see how all this ties together at this installment of our "What is...?" seminar.

*In our "What is...?" seminar, you can learn about stuff that you always wanted to know but never understood. If you are a graduate student of mathematics this seminar is for you. The talks are elementary and accessible for students not familiar with the field, from students for students.*

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Fachschaft MaPhy • PhD. Representatives in Mathematics

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