

# The chromatic number of triangle-free graphs on the double torus

Matěj Stehlík  
Charles University  
Czech Republic

*Joint work with*  
Daniel Král

## **Abstract**

The classical theorem of Grötzsch asserts that every triangle-free planar graph is 3-colourable. Triangle-free graphs embeddable on the torus are 4-colourable, as was shown by Kronk and White. Gimbel and Thomassen asked whether triangle-free graphs on the double torus are also 4-colourable. This question was recently settled in the affirmative; here we present the proof of this result.