Oberseminar Theoretische Informatik
Sommersemester 2007

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Linear Problem Kernels for NP-Hard Problems on Planar Graphs

Mo, 18.06.2007 um 14 Uhr (c.t.) im SR 3319 (Ernst-Abbe-Platz 2, 3. Stock).

We develop a generic framework for deriving linear-size problem kernels for NP-hard problems on planar graphs. We demonstrate the usefulness of our framework in several concrete case studies, giving new kernelization results for Connected Vertex Cover, Minimum Edge Dominating Set, Maximum Triangle Packing, and Efficient Dominating Set on planar graphs. On the route to these results, we present effective, problem-specific data reduction rules that are useful in any approach attacking the computational intractability of these problems.

Internetseite der Veranstaltung:
`http://theinf1.informatik.uni-jena.de/teaching/ss07/oberseminar-ss07`