On a new class of forcing notions

David Chodounsky

Academy of Sciences of the Czech Republic, Czech Republic
`david.chodounsky@matfyz.cz`

The talk is based on the joint work with Jindra Zapletal

Session: 32. Set Theory

We isolate a new class of forcing notions intermediate between σ-centered and c.c.c. This class is closed with respect to regular subposets and finite support iteration, it is not productive nor productively c.c.c. Forcings in this class add unbounded reals, do not add random reals, cofinal branches into ω_1-trees, uncountable cliques in closed graphs, nor separate uncountable gaps. Most posets, where the proof of c.c.c. uses a straightforward Δ-system argument, fall into this class. This forcing property appeared implicitly in recent work of T. Yorioka.