Cichoń's minimum with F_σ measure zero ideal

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There are 23 many assignments of $\aleph_1$ and $\aleph_2$ to the cardinal invariants appearing in Cichoń's diagram not violating Cichoń's diagram and the constraints $\mathrm{add}(\mathcal{M}) = \min\{\mathfrak{b}, \mathrm{cov}(\mathcal{M})\}$ and $\mathrm{cof}(\mathcal{M}) = \max\{\mathfrak{d}, \mathrm{non}(\mathcal{M})\}$. Each of them are forceable (mainly due to Bartoszyński–Judah–Shelah).

On the other hand, there are 36 many assignments of $\aleph_1$ and $\aleph_2$ to the cardinal invariants appearing in Cichoń's diagram and $\mathrm{cov}(\mathcal{E})$ and $\mathrm{non}(\mathcal{E})$ not violating currently known ZFC results, where $\mathcal{E}$ is the ideal generated by F_σ measure zero sets. We conjecture that all of them are forceable.

In this talk, we show partial results of this conjecture.

This is joint work with Diego Mejía and Ryoichi Sato.