Do infinitely often equal trees add Cohen reals?

Yurii Khomskii (KGRC, University of Vienna)

A real $x \in \omega^\omega$ is called *infinitely often equal* (*ioe*) iff $\exists^\infty n(x(n) = y(n))$ for all $y \in \omega^\omega$ in the ground model. In joint work with Giorgio Laguzzi, we analysed the σ-ideal $\mathfrak{I}_{\mathrm{ioe}}$ naturally related to ioe reals, in the sense that forcing with Borel $\mathfrak{I}_{\mathrm{ioe}}$-positive sets canonically adjoins them. Does such a forcing add Cohen reals? By unpublished work of Goldstern and Shelah, we know that some conditions do; but it is open whether *all* conditions do. I will present some results that could provide an answer. If there are conditions forcing that no Cohen reals are added, then this would provide an alternative solution to Fremlin's problem "can we add ioe reals without adding Cohen reals", recently solved by Zapletal.