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Title: Bounded Dialectica Interpretation: categorically

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Abstract: Recently Ferreira and Oliva introduced the Bounded Functional Interpretation (BFI) as a way of continuing Kohlenbach's programme of shifting attention from the obtaining of precise witnesses to the obtaining of bounds for these witnesses, when proof mining. One of the main advantages of working with bounds, as opposed to witnesses, is that the non-computable mathematical objects whose existence is claimed by various ineffective principles can sometimes be bounded by computable ones. In this talk we present first steps towards a categorical version of BFI, along the lines of de Paiva's version of Gödel's Dialectica interpretation, the Dialectica Categories. The previous categorical constructions seem to extend smoothly to the new ordered setting.