

# LOGIKSEMINARIET STOCKHOLM–UPPSALA

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## **An E-bicategory of E-categories**

A type-theoretic formalisation of bicategories is introduced, and it is shown that small E-categories, together with their functor categories, form such an E-bicategory. This is carried out using only basic recursive definitions, in the version of predicative type theory with a hierarchy of universes implemented by Agda. This relates to earlier work by Huet and Saïbi, who constructed a large category of small categories in Coq, but with the use of inductive families. The construction presented here may be considered more natural, particularly from the point of view of higher-dimensional category theory.

Onsdag 26 januari kl. 13.15–15.00,  
sal 3513, MIC,  
Polacksbacken, Uppsala.

Logikseminariets hemsida:  
<http://www.math.su.se/matematik/forskning/logik/>