

**RELATIVE INFINITESIMALS: A PROMISING
APPROACH FOR HIGH-SCHOOL TEACHING OF
ANALYSIS**

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Topic #10: *Nonstandard Methods and teaching.*

Hrbáček's system FRIST makes it possible to define “internally” when a function is internal without any explicit reference to model theory, i.e. a student can check whether a function is acceptable or not by observing whether it satisfies a specific rule. It is possible to know if a statement can transfer simply by reading it. And it is also possible to differentiate a function at nonstandard values directly, without using transfer.

Though the adaptation of this system to high school teaching is not yet completed, I will present the state of the art and future prospects.

The presentation will not necessarily follow Hrbáček's rigorous notation, but has been worked in close relation with him. The notation is one which we think can be used in school.

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