

Errata of “Superposition for Full Higher-Order Logic”

Alexander Bentkamp, Jasmin Blanchette, Sophie Touret,
Petar Vukmirović

Nonstrict term order

Employing a nonstrict term order for $o\lambda\text{Sup}$ renders the calculus incomplete, contrary to what is claimed in the paper. The most straightforward way to fix the calculi is to replace the nonstrict term order \succsim by the reflexive closure \succeq of the strict term order \succ . The errata document of λSup explains this in more detail.

Selection of positive literals

The definition of selection functions on page 5 allows selection of positive literals if they are of the form $s \approx \perp$. The completeness theorem does not hold up when using this feature. Our completeness proof relies on the completeness proof of $o\text{Sup}$ [23], and as the errata of $o\text{Sup}$ explain in more detail, $o\text{Sup}$ ’s completeness proof breaks when positive literals are selected.