



Christoph Benz Müller, Articulate Software
(currently funded by DFG grant BE 2501/6-1)

Thanks to:

- ▶ 'E'-inside
(Stephan Schulz)



Thanks to:

- ▶ 'E'-inside
(Stephan Schulz)
- ▶ 'THF0'-outside
(Geoff Sutcliffe)



Thanks to:

- ▶ 'E'-inside
(Stephan Schulz)
- ▶ 'THF0'-outside
(Geoff Sutcliffe)
- ▶ Frank Theiss
parser, shared term
datastructure, indexing



Thanks to:

- ▶ 'E'-inside
(Stephan Schulz)
- ▶ 'THF0'-outside
(Geoff Sutcliffe)
- ▶ Frank Theiss

Further thanks to:

- ▶ Larry Paulson
- ▶ Arnaud Fietzke
- ▶ Chad Brown
- ▶ Jasmin Blanchette
- ▶ ...

LEO-II — A Cooperative Higher-Order–First-Order ATP

Thanks to:

- ▶ 'E'-inside
(Stephan Schulz)
- ▶ 'THF0'-outside
(Geoff Sutcliffe)
- ▶ Frank Theiss

Further thanks to:

- ▶ Larry Paulson
- ▶ Arnaud Fietzke
- ▶ Chad Brown
- ▶ Jasmin Blanchette
- ▶ ...

Key aspects of LEO-II:

extensional HO-RUE-Resolution
extensional HO-pre-unification (depth-bounded)
OTTER like loop
cooperation with FO-ATP (E)
written in OCAML

LEO-II — A Cooperative Higher-Order–First-Order ATP

Thanks to:

- ▶ 'E'-inside
(Stephan Schulz)
- ▶ 'THF0'-outside
(Geoff Sutcliffe)
- ▶ Frank Theiss

Further thanks to:

- ▶ Larry Paulson
- ▶ Arnaud Fietzke
- ▶ Chad Brown
- ▶ Jasmin Blanchette
- ▶ ...

Key aspects of LEO-II:

extensional HO-RUE-Resolution
extensional HO-pre-unification (depth-bounded)
OTTER like loop
cooperation with FO-ATP (E)
written in OCAML

Why did I win?

very simple relevance filtering + parameter scheduling