## Non-Minimality of Minimal Telescopers Explained by Residues

## Manuel Kauers Johannes Kepler University, Austria

30th Applications of Computer Algebra - ACA 2025

Joint work with Shaoshi Chen, Christoph Koutschan, Xiuyun Li, Ronghua Wang, and Yisen Wang

We will report on our joint ISSAC'25 paper. In this paper, elaborating on an approach recently proposed by Mark van Hoeij, we continue to investigate why creative telescoping occasionally fails to find the minimal-order annihilating operator of a given definite sum or integral. We offer an explanation based on the consideration of residues.