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To whom it may concern,

Informal Systems contributes to an open-source ecosystem of cooperatively owned and governed distributed organizations running on reliable distributed systems. We design, implement, and formally verify distributed systems and protocols, including blockchain systems like Tendermint and Cosmos. We have offices in Canada, Switzerland, Germany and Austria. The Austrian branch heavily focuses on formal verification aspects, and employs alumni, previous postdocs, and external associate professors from TU Wien and IST Austria.

Our current focus is IBC, the interblockchain communication protocol, and other bridges that allow to connect two or more blockchains. Many such protocols are currently developed, and due to the financial incentives, their correctness is of utmost importance. Computer-aided verification promises a high degree of trust in verified protocols and software. While breakthroughs have been made over the recent years that allows us to scale verification to systems of practical sizes, the new interchain protocols impose new semantics, and ask for new verification methodologies. The project LORDS (LOCAL Reasoning about Distributed Systems) is thus highly timely and we strongly support its goals.

With Laura Kovacs and Florian Zuleger, the Austrian partners, we have worked together on several research projects, we co-advised a PhD student, and we co-authored several papers on automated verification of distributed algorithms. Igor and Laura were co-PC chairs of CONCUR 2020, the conference on concurrency theory, in Vienna. We stay in close contact with Laura, Florian and their groups and are happy to provide them with input regarding current trends and benchmarks. Also, Igor has worked on BIP with Prof. Joseph Sifakis and they co-authored a paper that was presented at CONCUR 2016. This work constitutes a bridge to the French partners.

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We thus strongly support the application for the project LORDS.

Best regards,



Josef Widder

Igor Konnov

**Bio:** Igor Konnov is a principal scientist at Informal Systems (Austria), spun off from Interchain Foundation (Switzerland). He is specifying blockchain protocols in TLA+ and developing model checking techniques. Igor is leading research and development of Apache — a symbolic model checker for TLA+. Before joining Informal Systems and Interchain Foundation, Igor Konnov worked as a researcher at Inria Nancy (France) and as a postdoc at TU Wien (Austria). He received his MSc and PhD in Applied Mathematics and Computer Science from Lomonosov Moscow State University (Russia) in 2003 and 2009. In 2019, Igor received his Habilitation from TU Wien (Austria).

**Bio:** Josef Widder obtained his PhD from TU Wien (Vienna University of Technology, Austria) in 2004, and has spent his post-doc at Ecole polytechnique and Texas A&M University. He returned to TU Wien in 2011, and became external associate professor (Privatdozent) at the Forsythe group in 2015. Since 2020, Josef Widder is principal scientist with Informal Systems.