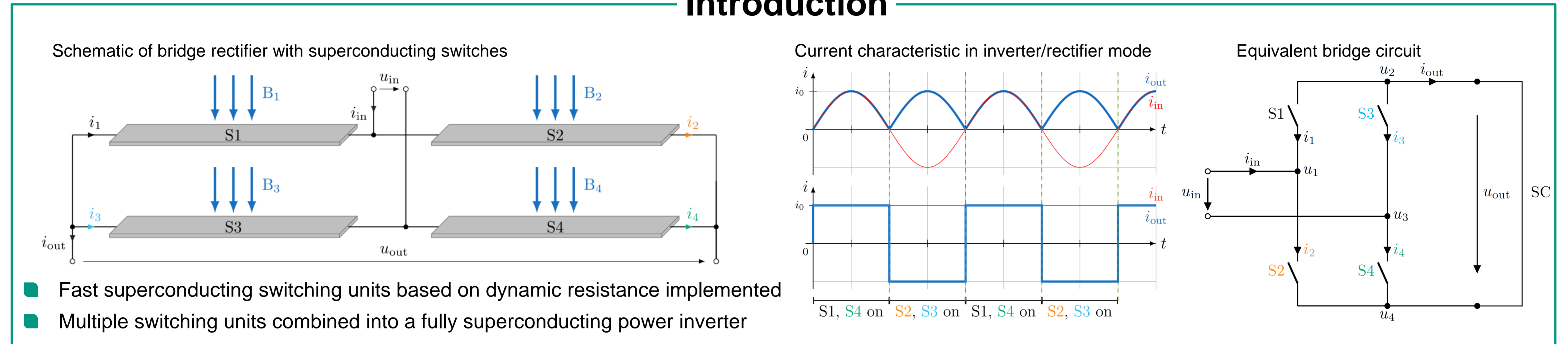


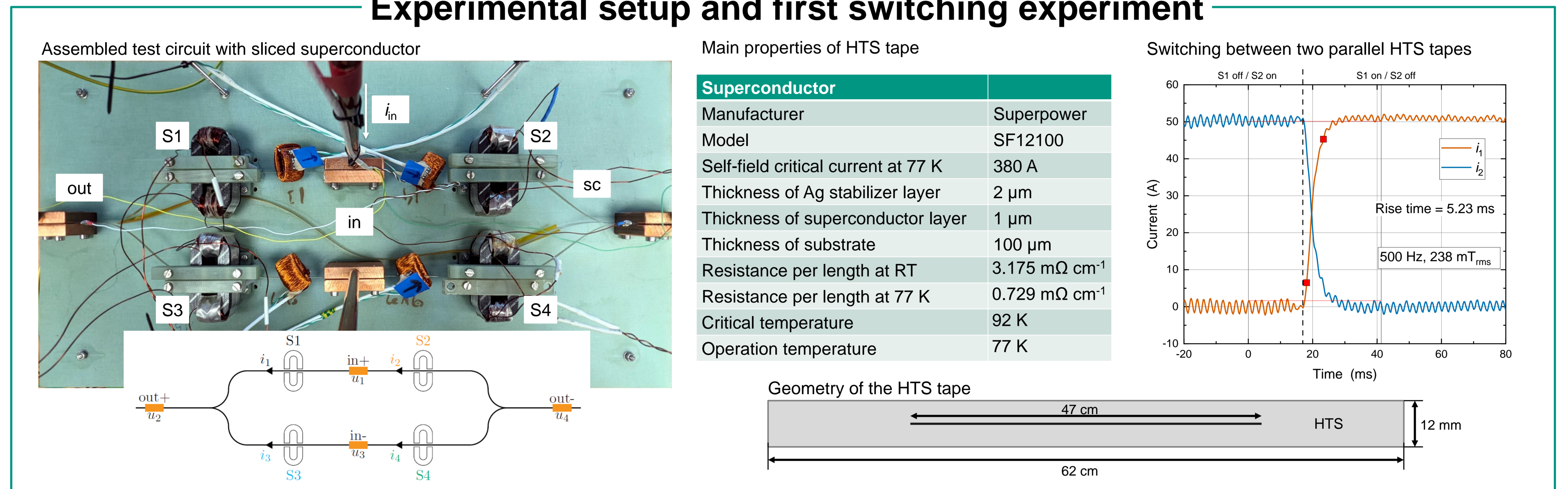
Switching device with magnet field-triggered high-temperature superconducting switching units

Quoc Hung Pham and Mathias Noe

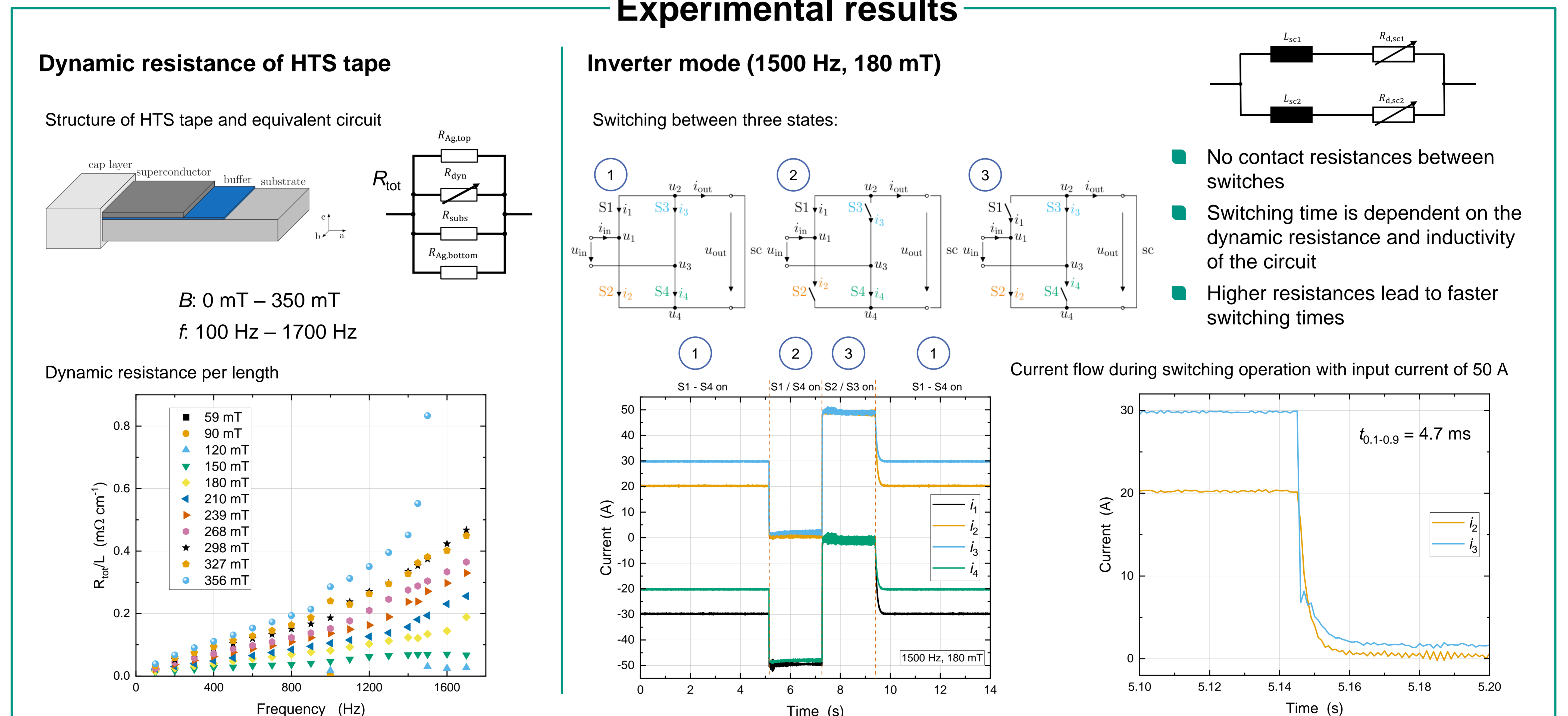
Introduction



Experimental setup and first switching experiment



Experimental results



Conclusion and outlook

- For the first time, the feasibility of a fully superconducting power inverter based on the dynamic resistance of HTS tapes was demonstrated
- Upscaling of the dynamic resistance by increasing the active magnetic length is ongoing and enables fast switching times
- Variable dynamic resistance allows smooth switching operations
- Low voltage and high current inverters are possible

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