## 24th Australian Institute of Physics Congress



Contribution ID: 636 Type: Talk (preferred)

## A quantum spin heat engine with trapped Yb<sup>+</sup> ions

Friday 16 December 2022 10:00 (15 minutes)

The first steps towards a proof-of-concept memory powered heat engine using trapped  $^{171}{\rm Yb}^+$  ions. This proof-of-concept intends on showing entropy transfer between thermal and spin reservoirs with minimal energy loss, therefore allowing a higher efficiency heat engine than allowed classically.

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Session Classification: AIP: Quantum Science and Technology

Track Classification: AIP Congress: AIP: Quantum Science and Technology