

HTS characterization possibility for ARIES @ UNIGE

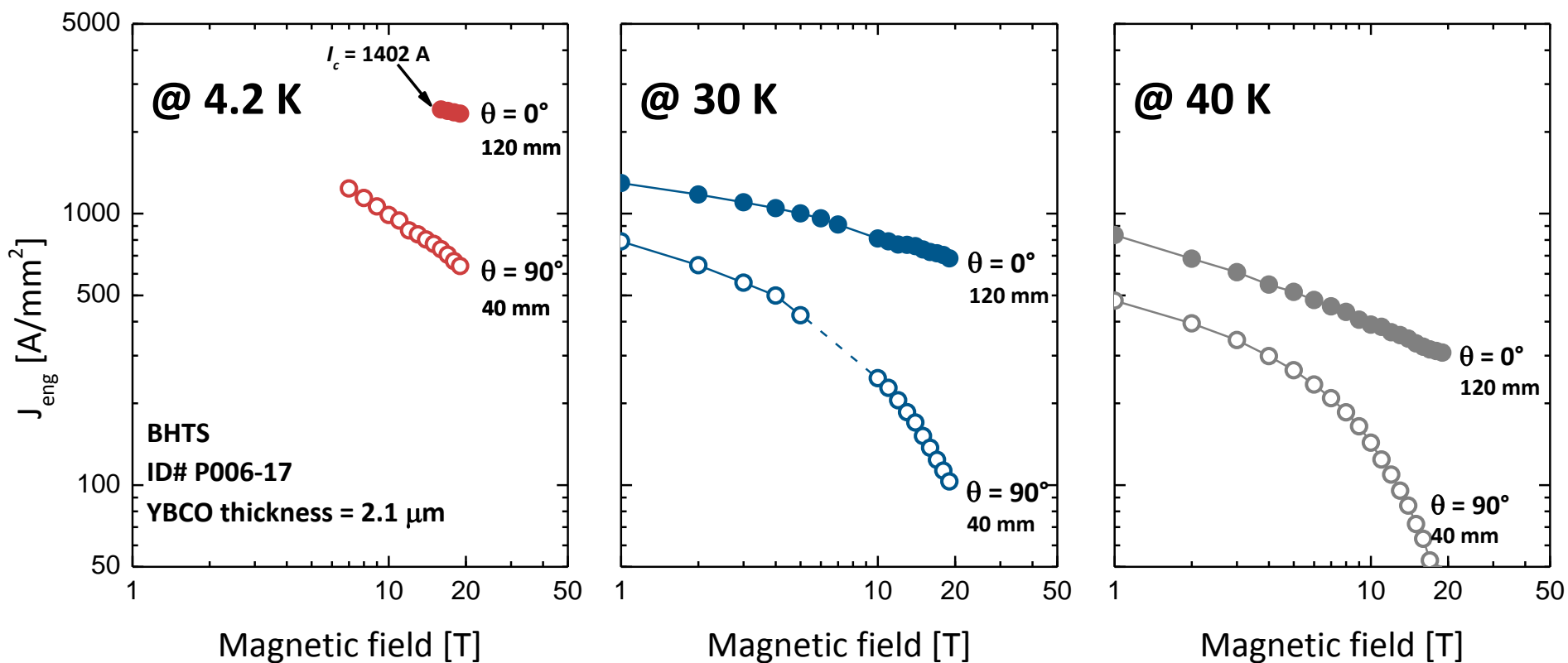
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Test facilities

- ***Critical current vs temperature, field intensity and orientation***
up to 50 ± 0.01 K up to 21 T at fixed angles
maximum current ~ 2 kA @ $T = 4.2$ K and ~ 1 kA @ $T > 4.2$ K
- ***Critical current vs axial strain @ 4.2 K and 77 K***
- ***Stress vs strain (axial direction) @ 4.2 K, 77 K and RT***
- ***RRR and magnetoresistance***
- ***Low temperature / high field thermal conductivity***

4mm witness sample of the 12mm EuCARD-2 tape from BHTS



Critical current sample adapters

- *Short samples ~40 mm*
Angles: -15°, -7.5°, 0°, 7.5°, 15°, 22.5°, 30°, 37.5°, 45°, 90°
Tested up to 800 A
- *Long samples 126 mm in parallel field*
tested up 2 kA in LHe bath and 1 kA in gas flow
- ***Forthcoming: U-shaped samples in perpendicular field***
Long current injection
Also for 12mm-wide tapes

