

Magnetoelastic properties of intermetallic compounds and their neutron diffraction

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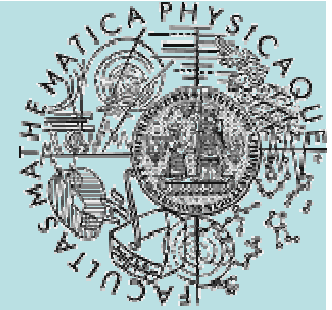
Vladimir Sechovsky
DCMP, Charles University, Prague



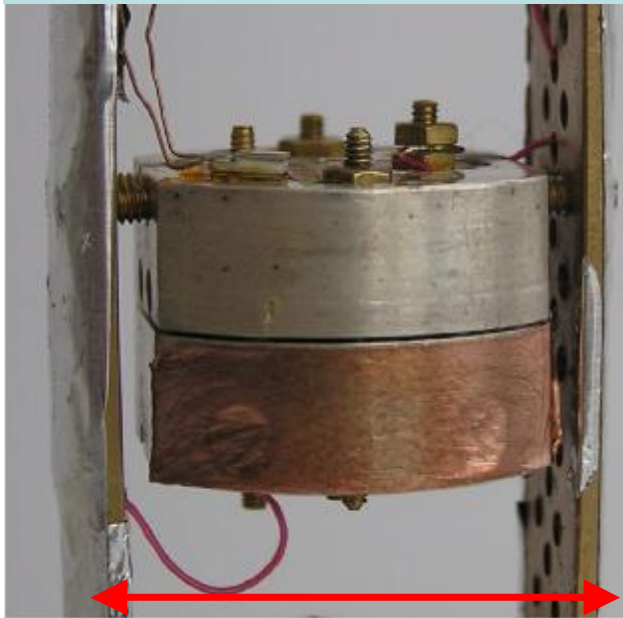


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Bulk properties measurement

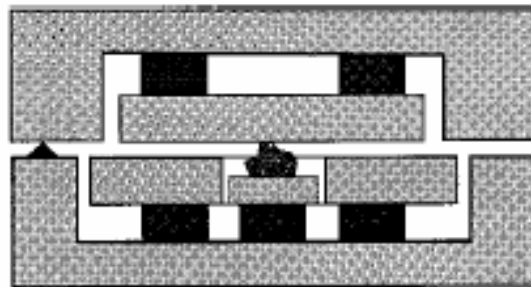


- Thermal expansion and magnetostriction



1.8 – 300 K

0 – 14 T

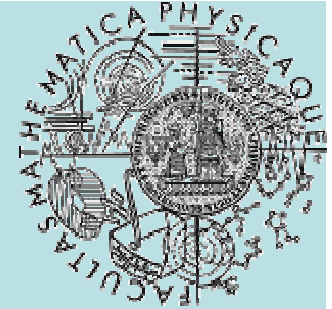


~2-3 cm

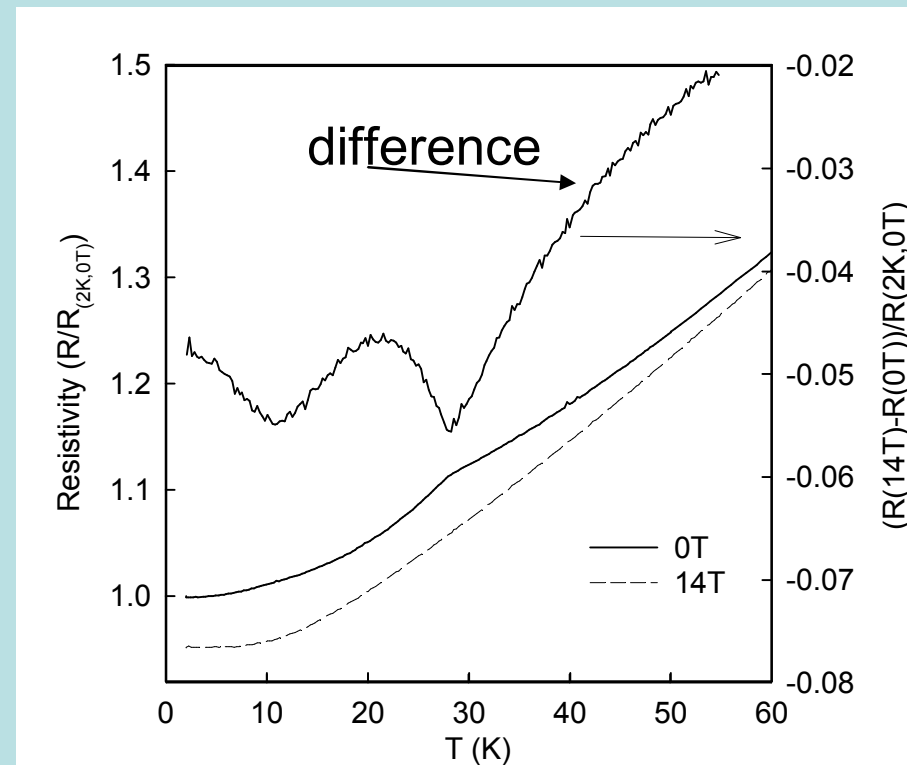
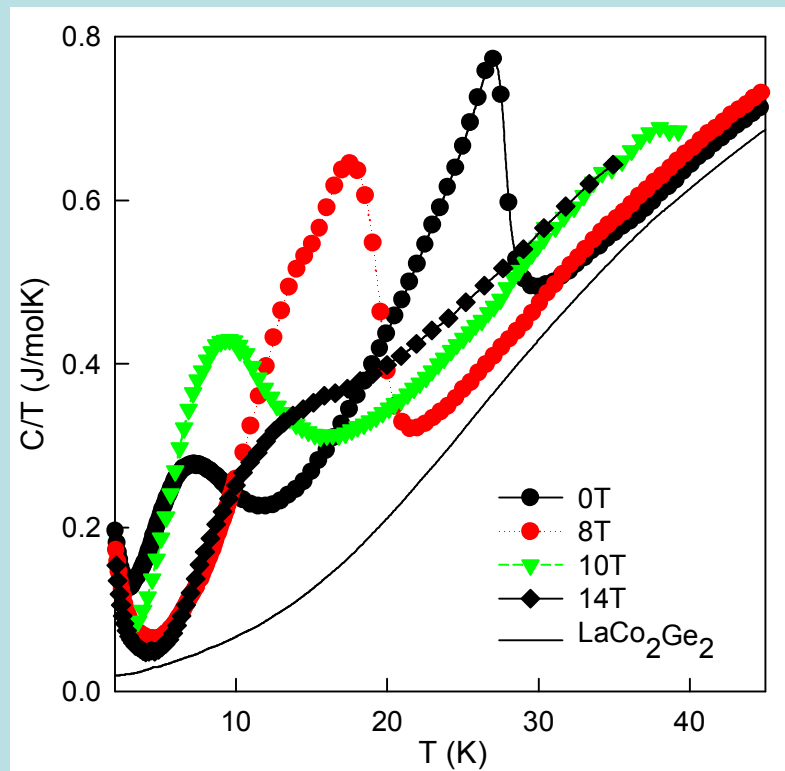
- Specific heat, magnetization, el. resistivity

Bulk properties measurement

ex.: PrCo_2Ge_2

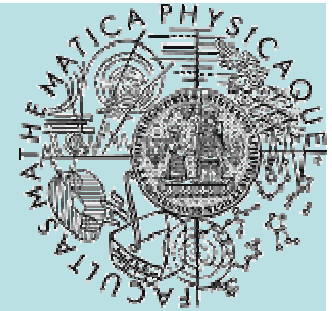


- Specific heat
- El. resistivity

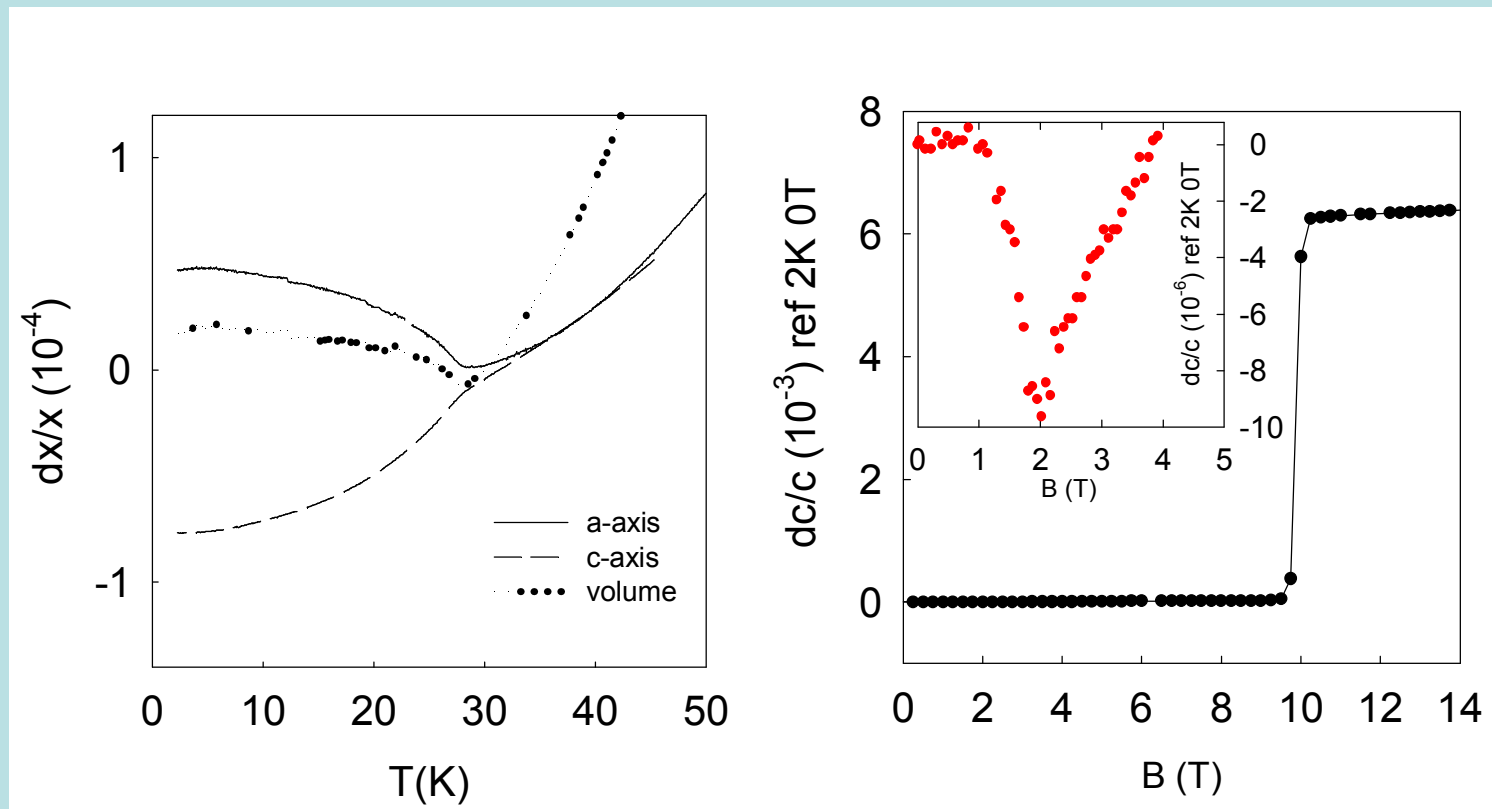


Bulk properties measurement

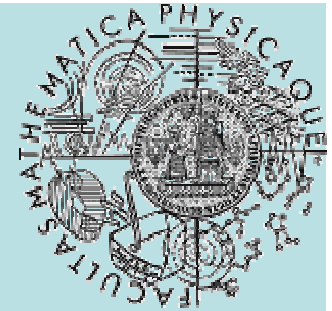
ex.: PrCo_2Ge_2



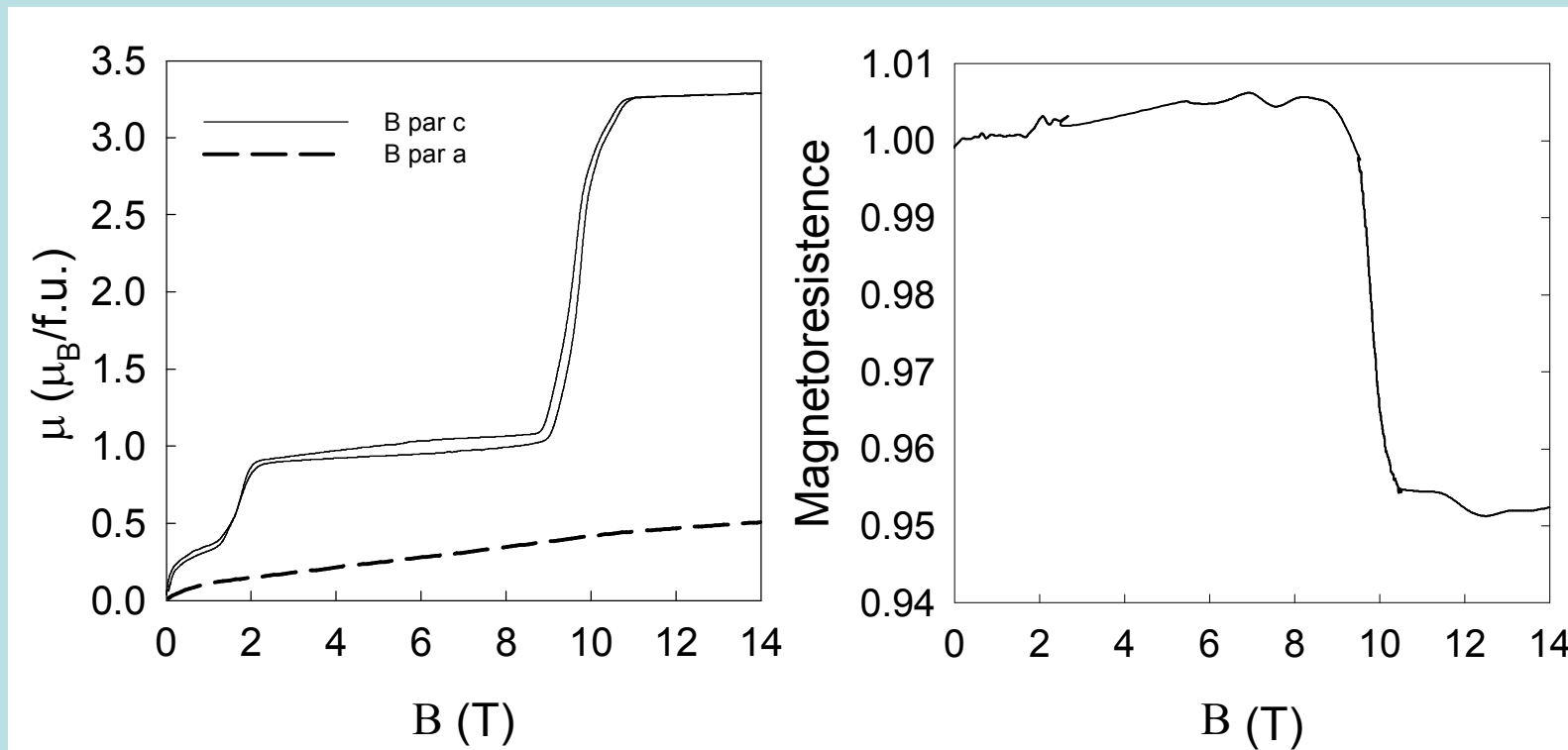
- Thermal expansion
- Magnetostriction



Bulk properties measurement ex.: PrCo_2Ge_2



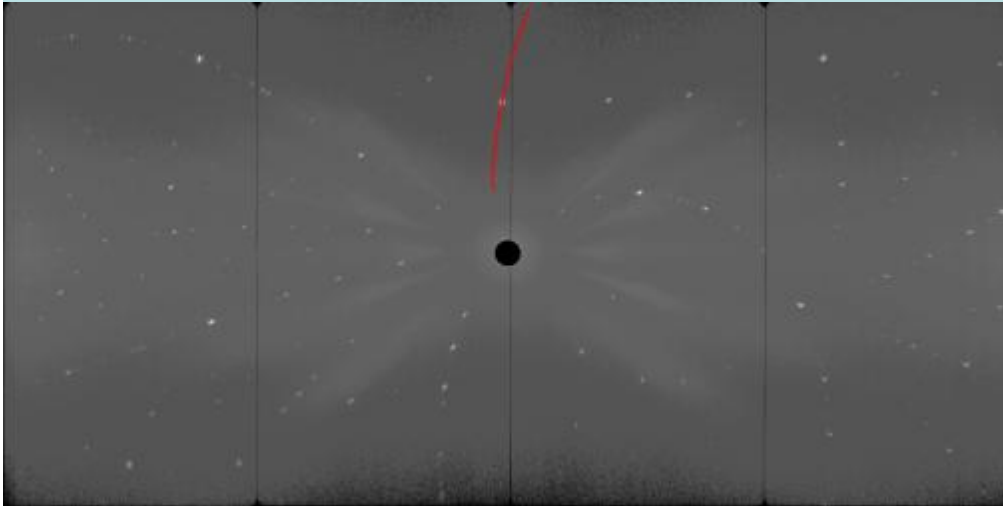
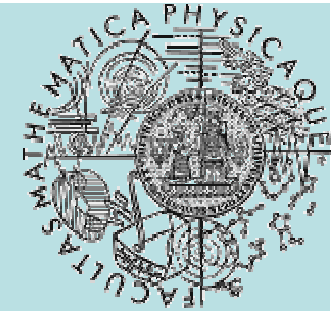
- Magnetization
- Magnetoresistance



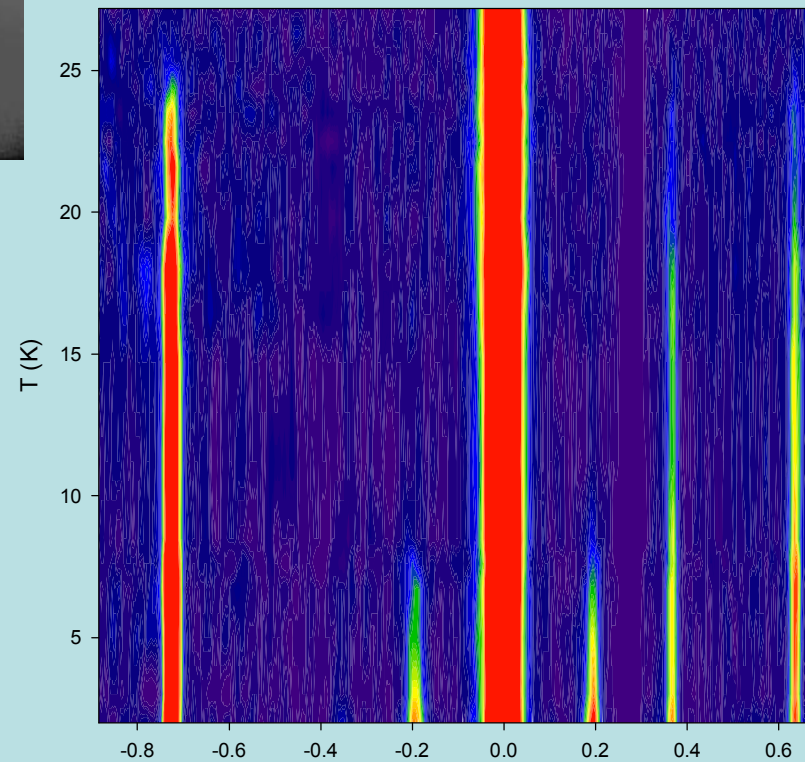
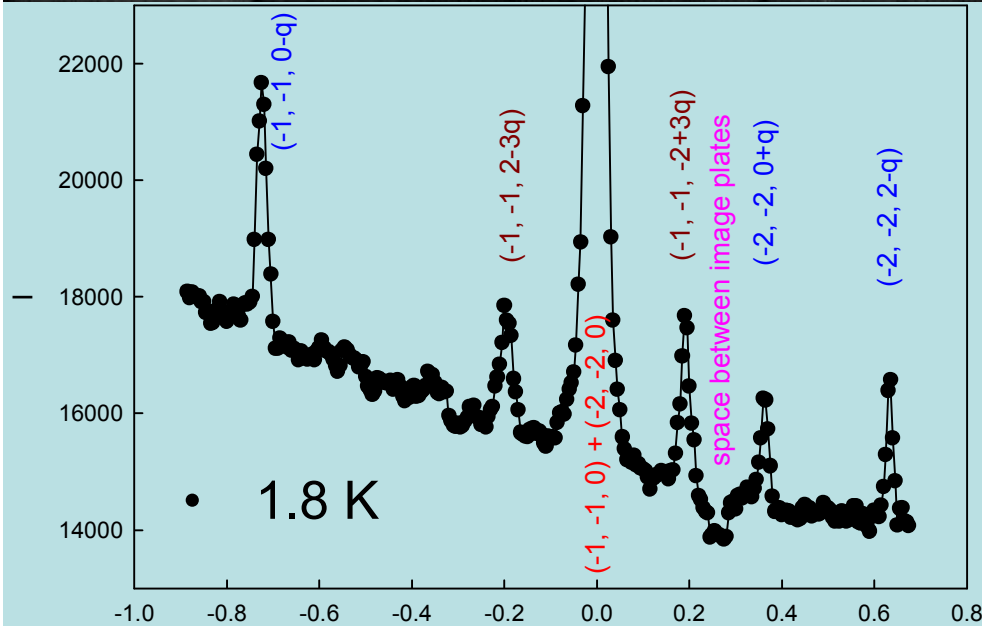


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VIVALDI experiment ex.: PrCo_2Ge_2

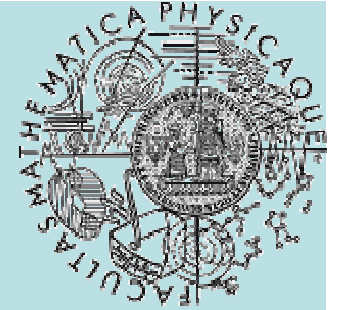


Determination of
propagation vector $(0, 0, 0.73)$





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Thank you for your attention.