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- Ideal theory only applies to the active ion in the paramagnetic.
- In a real system the demagnetisation is not adiabatic
- In order to determine how cold our ADR will get and how long it will stay cold we need to understand:-
 - Heat capacity of everything attached to the paramagnetic (this limits final temperature)
 - paramagnetic container
 - Thermal connection to experiment interface
 - The experiment
 - Eddy current heating due to changing magnetic field
 - All heat sources on paramagnetic (determines hold time)
 - Paramagnetic support thermal conductivity (e.g. kevlar)
 - All thermal radiation
 - Thermal conductivity of electrical wires
 - Optical radiation (if used for detectors)
 - Any other connection from another temperature (e.g. capillaries for pressure cells)









