

Heavy quarks:  
a continuing probe of the strong interaction

**International Scientific Seminar at Chicheley Hall**



# Heavy quarks

- probe of the strong interaction
- separation of scales
- weak coupling at short distance
- effective field theories
- lattice QCD

# At zero temperature

- well established
- high precision
- sophisticated, higher-order corrections
- pre- and postdictions

# At nonzero temperature

- hadronic medium or quark-gluon plasma
- motivated by heavy-ion collisions, RHIC and LHC
- more exploratory
- control systematics
- what are the right questions to ask?
- definite – universally accepted – results?

# This meeting

- mix of presentations at  $T = 0$  and  $T > 0$
- two discussion sessions
- develop both analytical and numerical understanding
- best practice and future strategy
- please interrupt and ask questions!