

# Assignment

- Look up the ROSAT all-sky survey count rate of the cataclysmic variable star SU UMa
- Assuming optically-thin thermal plasma emission with  $kT=6$  keV and interstellar absorption of  $N_H=10^{20}\text{cm}^{-2}$ , estimate the 2-10 keV energy flux of SU UMa
- Further calculate the XMM-Newton RGS count rate, and determine how long an observation is required to accumulate 20,000 RGS counts
- Find out when such an observation could be made next year