## Exactly Solvable Models

<u>References</u>: Exactly Solvable Models (Baxter) Statistical Mechanics made simple (Mattis)

Lecture 1: Ising model on Bethe lattice, 1-dimension (maybe spherical model)

<u>Lecture 2</u>: High temperature and low temperature expansion of Ising model [determine T\_c)

Lecture 3, 4: Solution of 2-d Ising model using free fermion method

<u>Lecture 5</u>: Solution of dimers (Kedar may do, in which case, I will work out Onsager's solution), list out other solvabel models and outline what is known.