## Chord

- Number of messages We study a Chord system, where nodes are spread on a circle.
  - Question 1 : Number of messages: What is the mean number of messages necessary for a request in a  $2^n$  computer system where nodes are uniformly distributed?
  - Question 2: Worst case: Idem, but the worst case? Give an example?
- Load balancing

We now investigate the load balancing in such systems.

- Question 1: Describe the two main problems linked to the load balancing.
- Question 2 : Disconnect/reconnect technique
  - Imagine a disconnect/reconnect technique that would improve load balancing
  - In which case this technique is efficient? What is its cost?
- Question 3 : Virtual Hosts technique
  - Imagine a Virtual Host technique that would improve load balancing.
  - In which case this technique is efficient? What is its cost?

