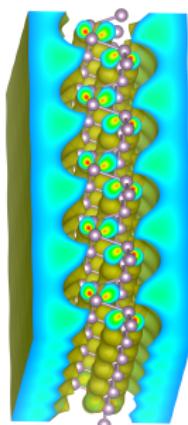


First-principles modelling of 2D semiconductors

I use our best understanding of electrons, protons, and how they glue together (quantum mechanics) to try to **predict** things.

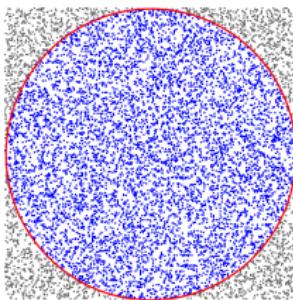
What?

- ▶ Energy gaps
- ▶ Exciton levels



How?

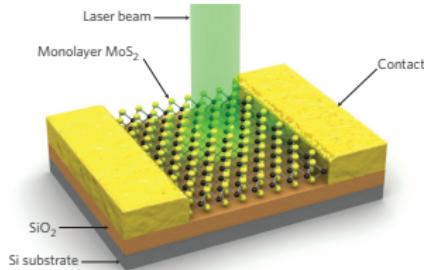
- ▶ Q. Monte Carlo



- ▶ [CASINO code]

Why?

- ▶ Tech. (Lopez-Sanchez et al., Nat. Nano 8, (2013).)



- ▶ Methods.