

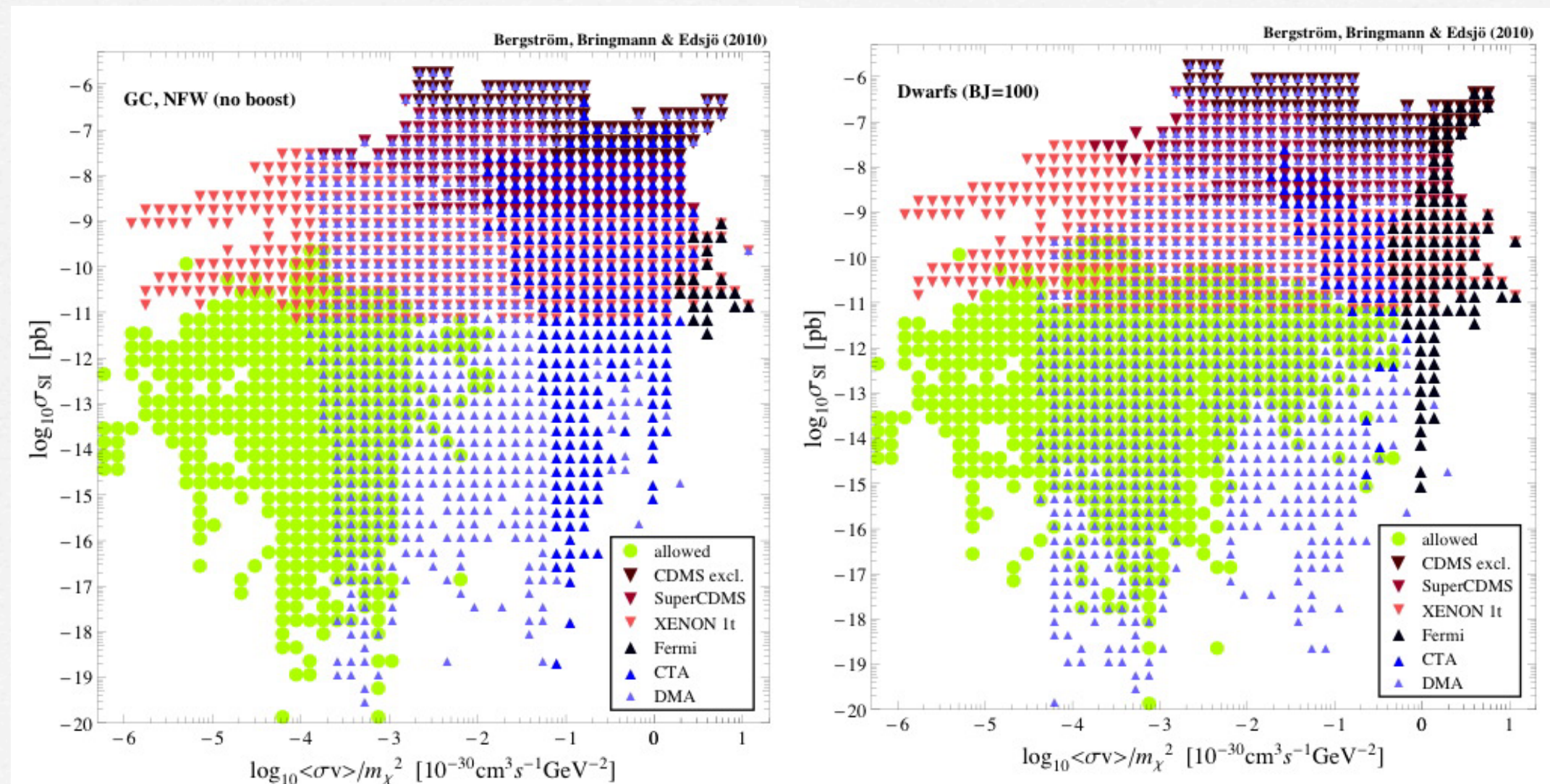
Signal vs Background

- What do we need to believe a signal?
- Coincidence of more experiments?
- Different types of experiments?
- But sometime DD/ID complementary...

E.g. SUSY models

ID and DD probe different part of the parameter space !

[Bergström, Bringmann & Edsjö-2010]



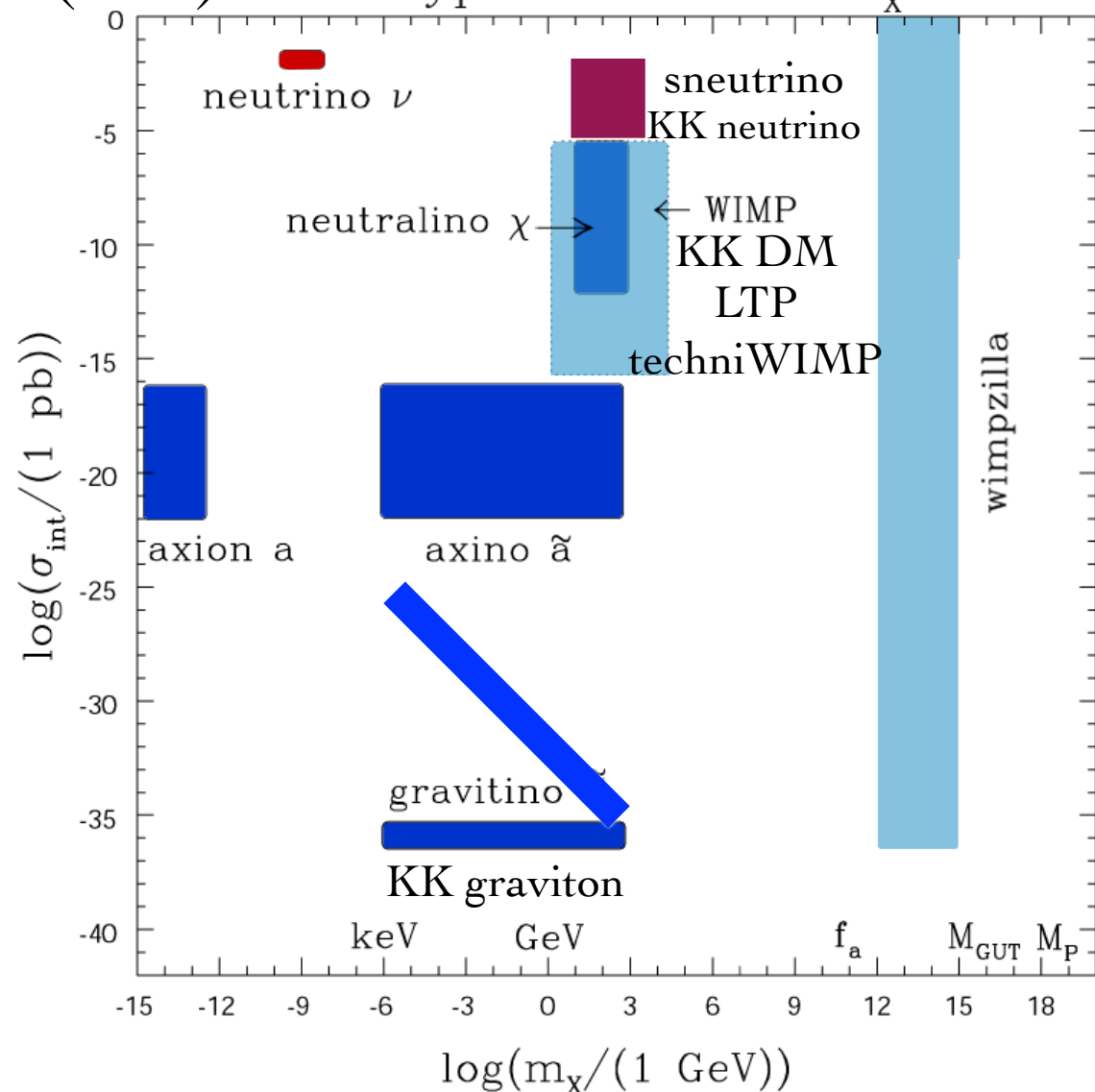
DM identity

- ☐ Mass ???
- ☐ Self-couplings (apart for gravity) ?
- ☐ Couplings to matter (apart for gravity) ?
- ☐ Production: WIMP, SuperWIMP,
Asymmetric, thermal, non-thermal
- ☐ ...

Huge parameter space

[Roszkowski 04]

(non) WIMP-type Candidates $\Omega_\chi \sim 1$



- impossible to cover all with same experiment !
- we are probing the plane from above, but not clear how far we can or will have to go...