



European Research Council
Established by the European Commission

Skrita kvantna stanja

Raziskovalna skupina na IJS



Ljupka



Igor



Tomaž



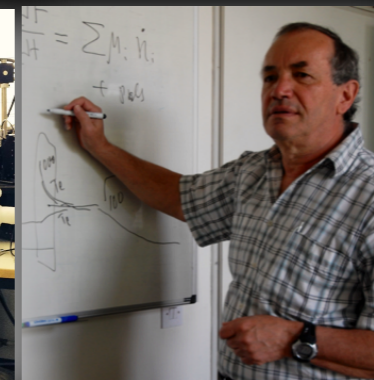
Damjan



Primož



Ian



Sergej



Dragan

Metastabilna stanja:

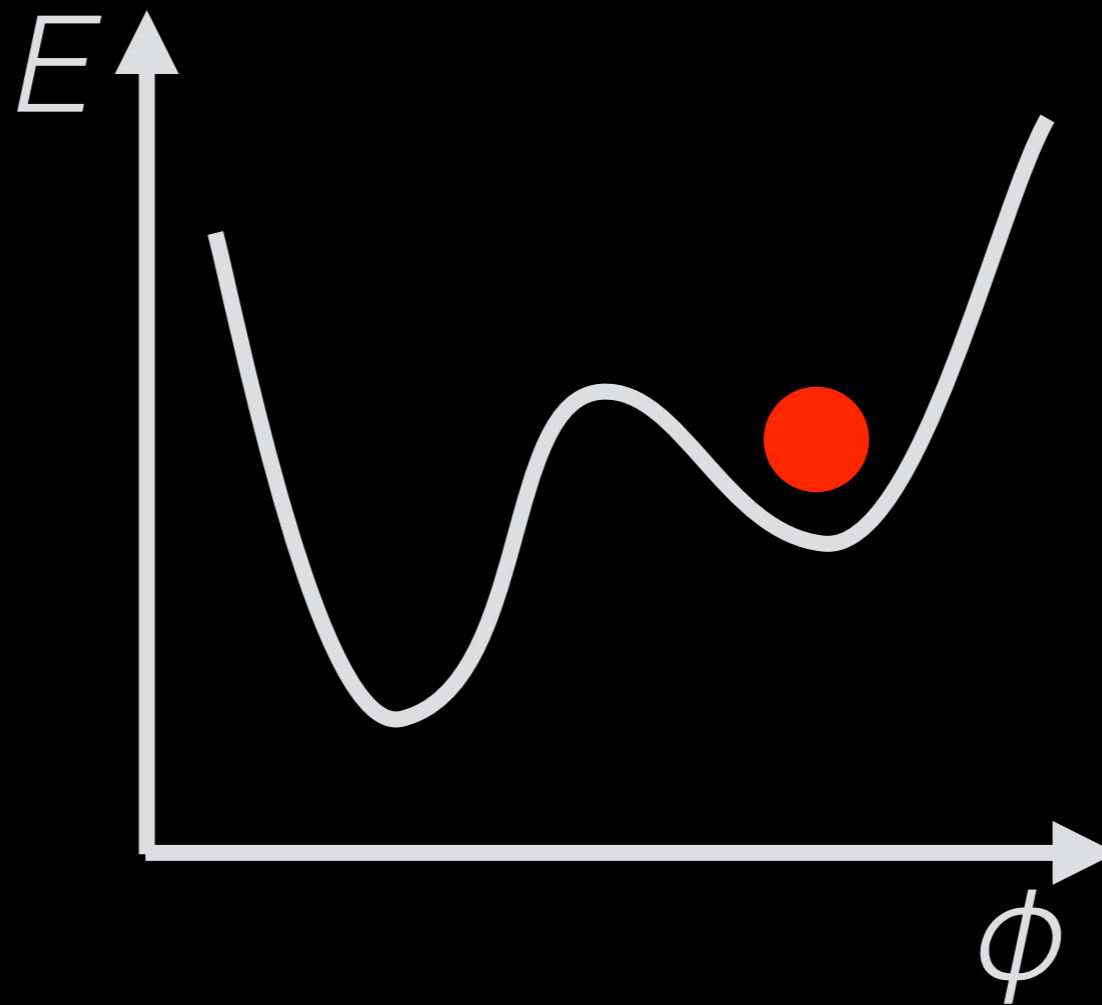


Zakaj nas zanimajo?



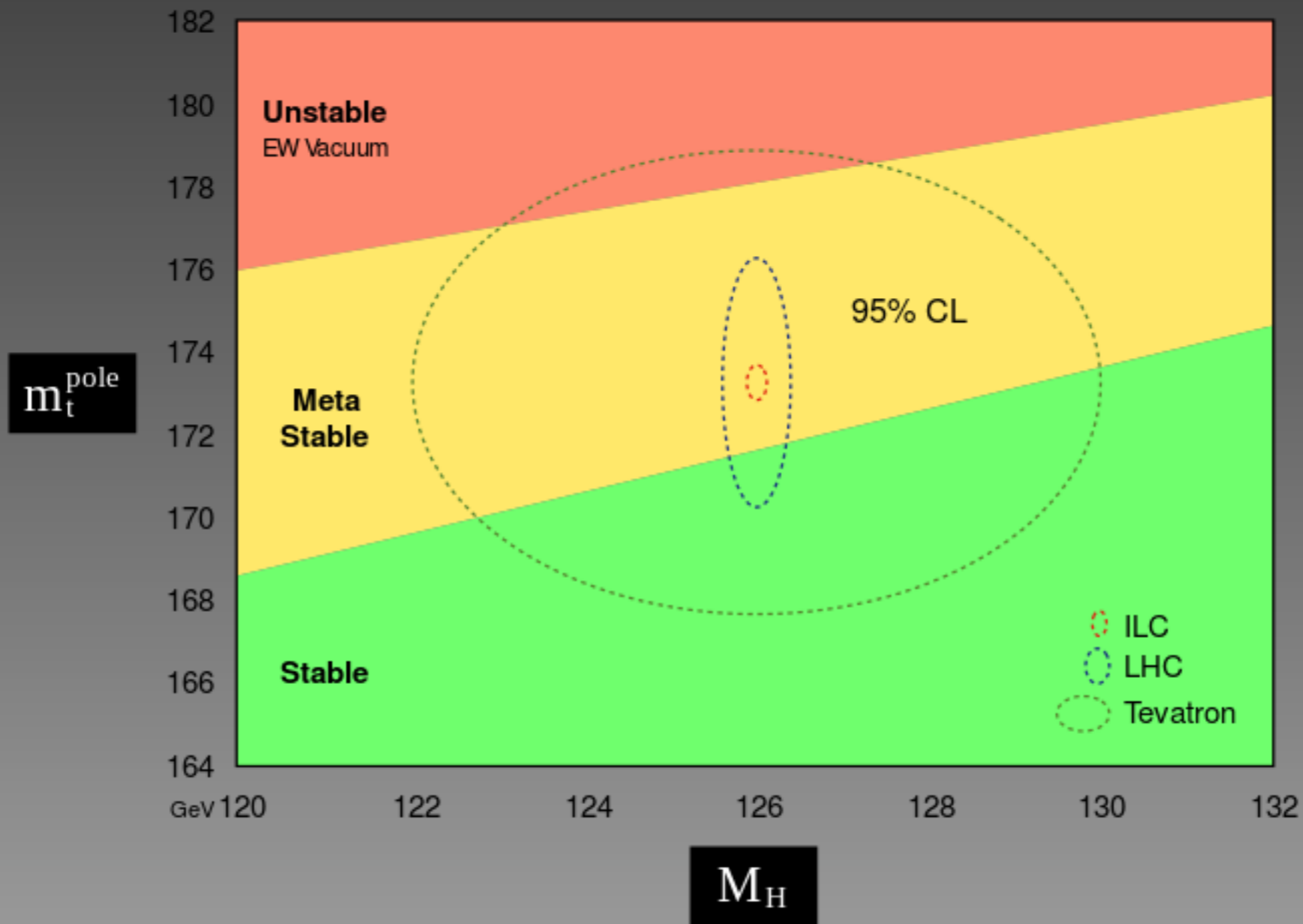
Diamonds are not forever

Je naše vesolje
metastabilno?



Turner in Wilczek (1982)

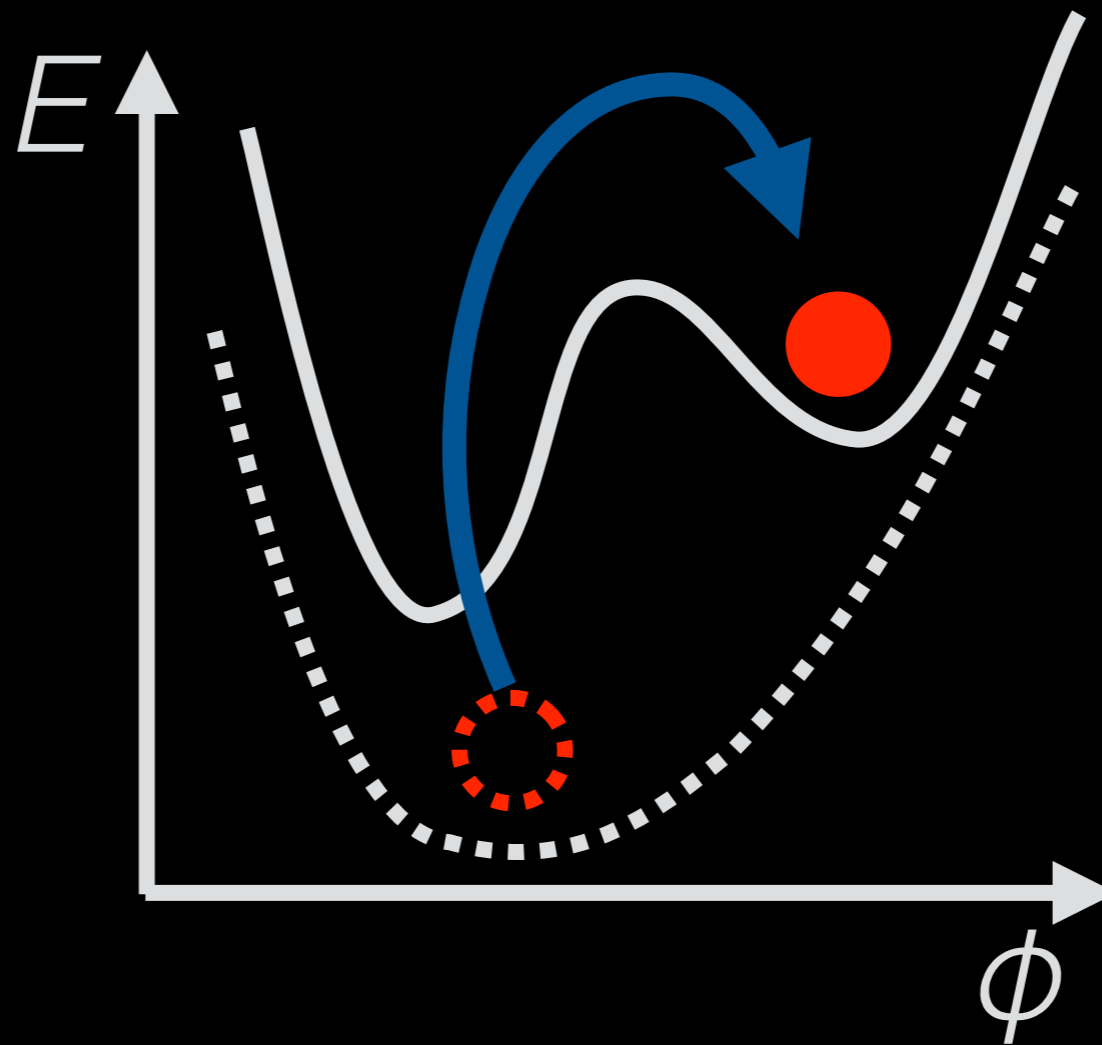
Napovedi o **stabilnosti** **vesolja**



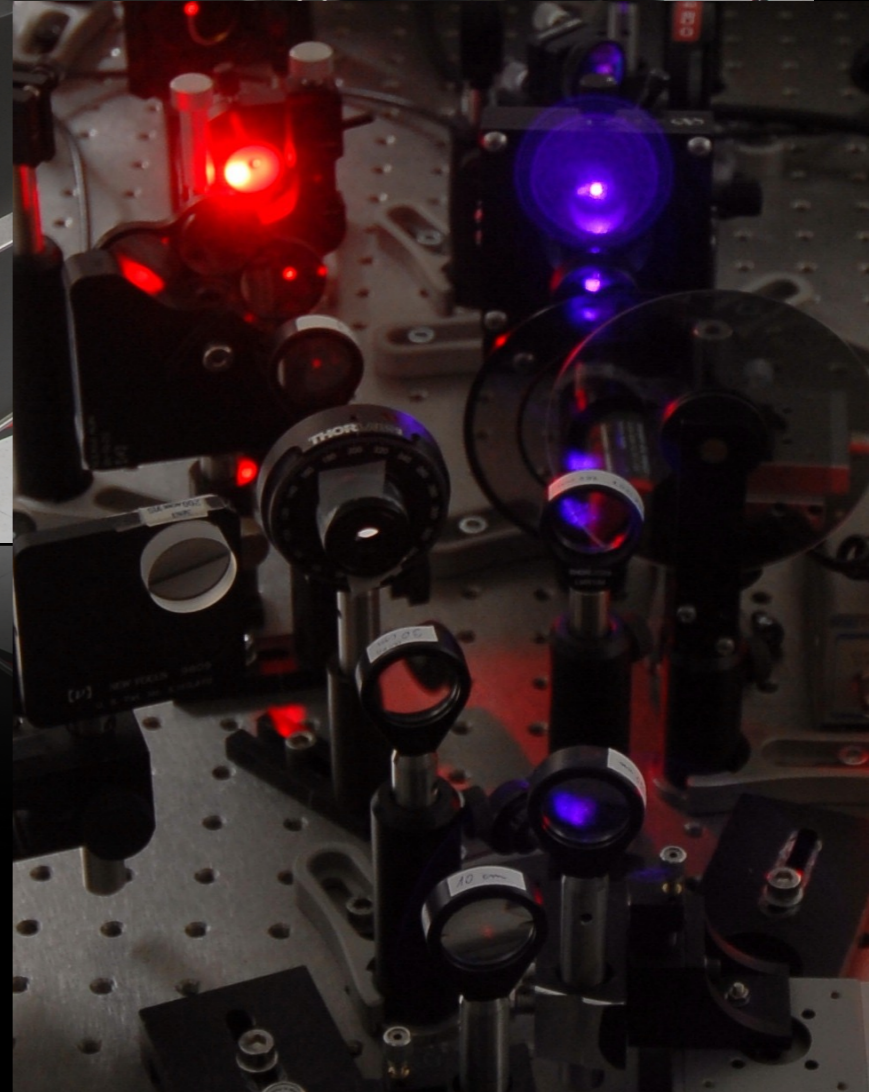
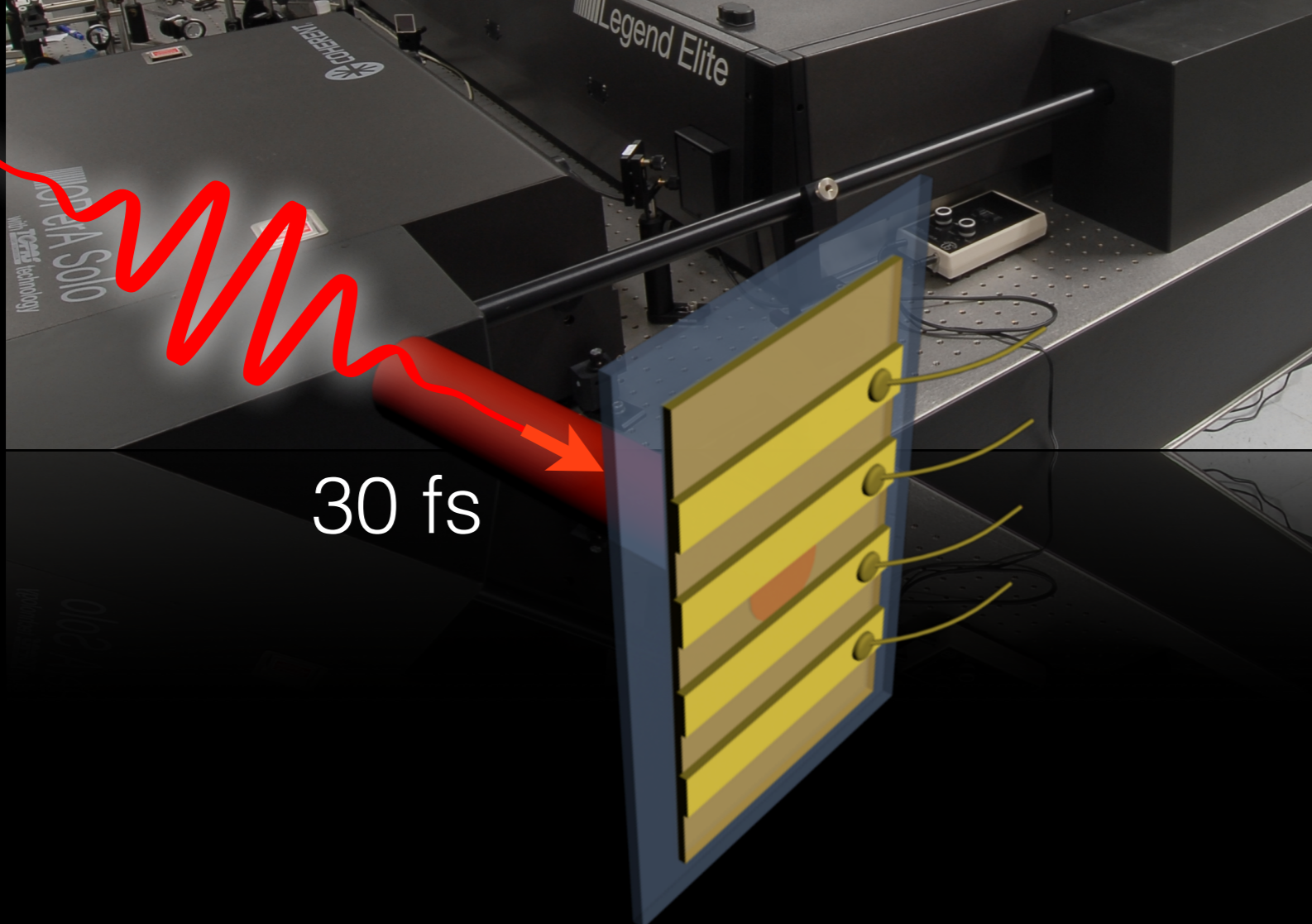
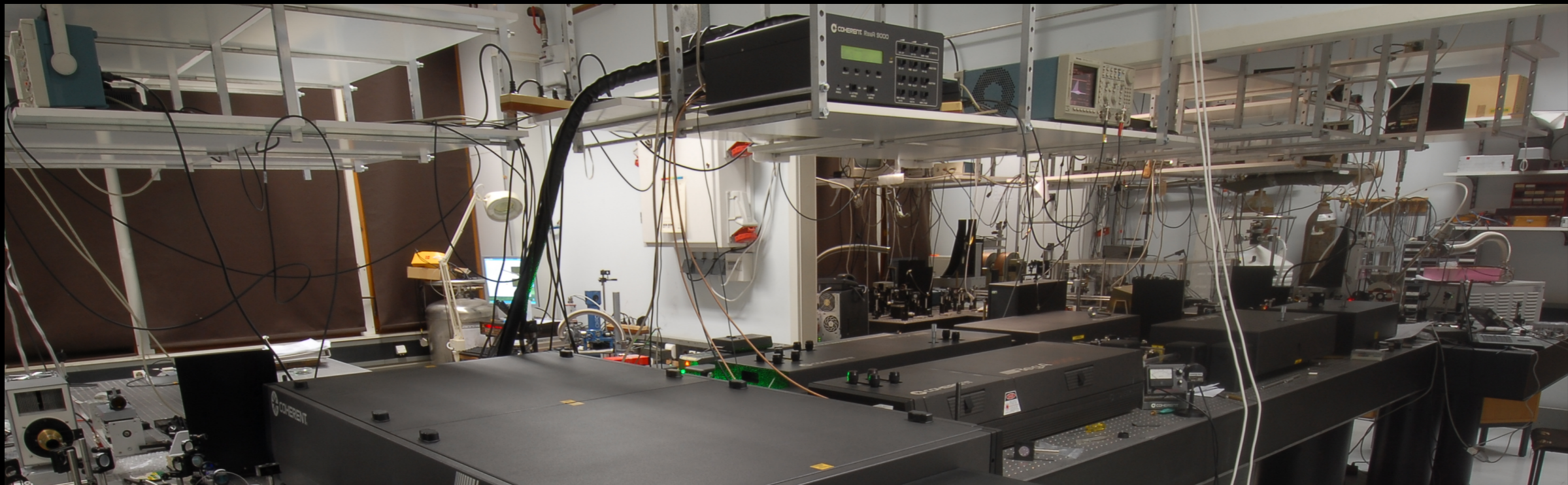
Kaj so skrita stanja?

Posebna vrsta metastabilnih stanj

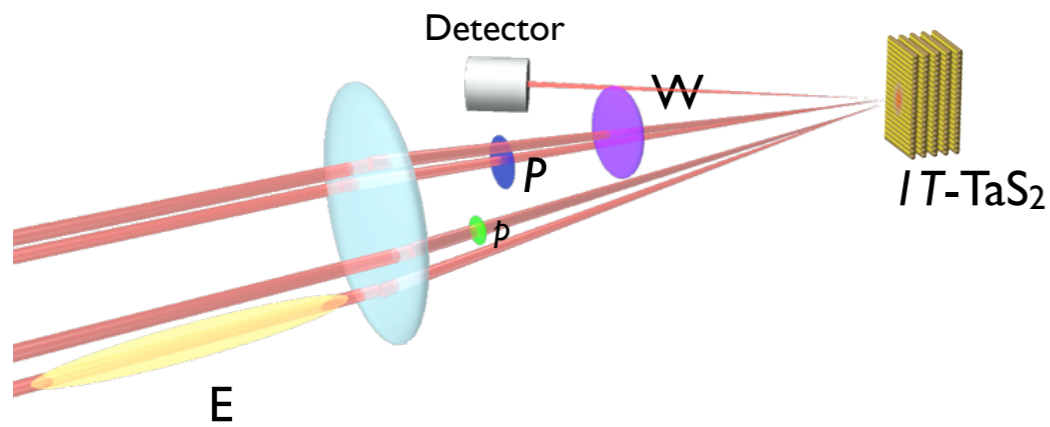
Skrita stanja



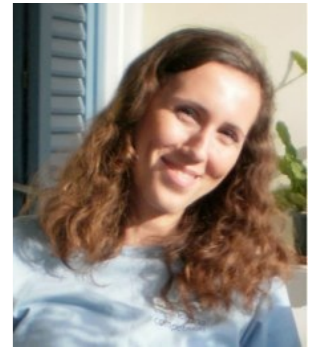
so metastabilna stanja, ki nastanejo pod neravnovesnimi pogoji



Nenavadni pojavi v spektru



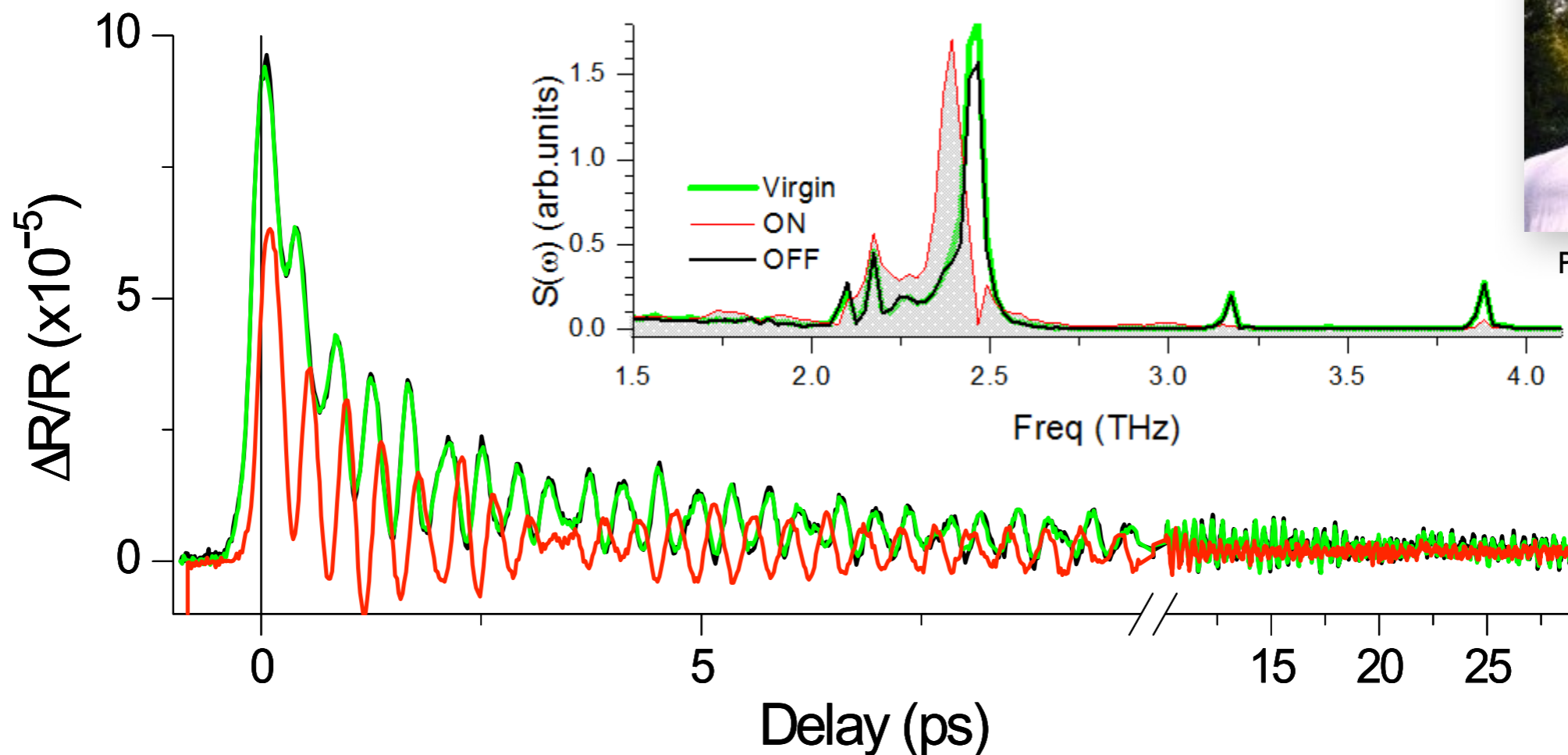
W = 50 fs "write"
E = 50 ps "erase"
P = "pump" (50 fs)
p = "probe" (50 fs)



Ljupka Stojchevska



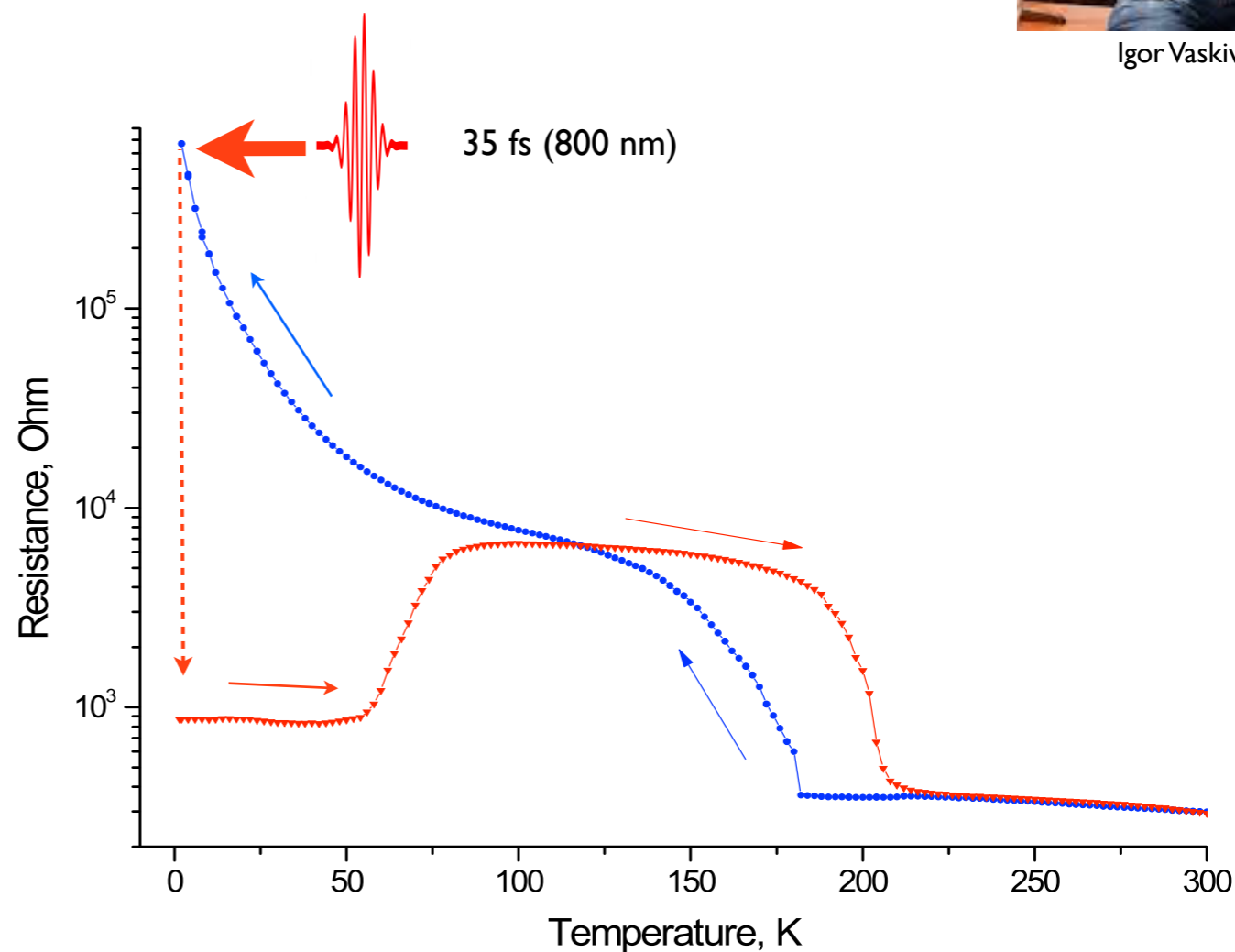
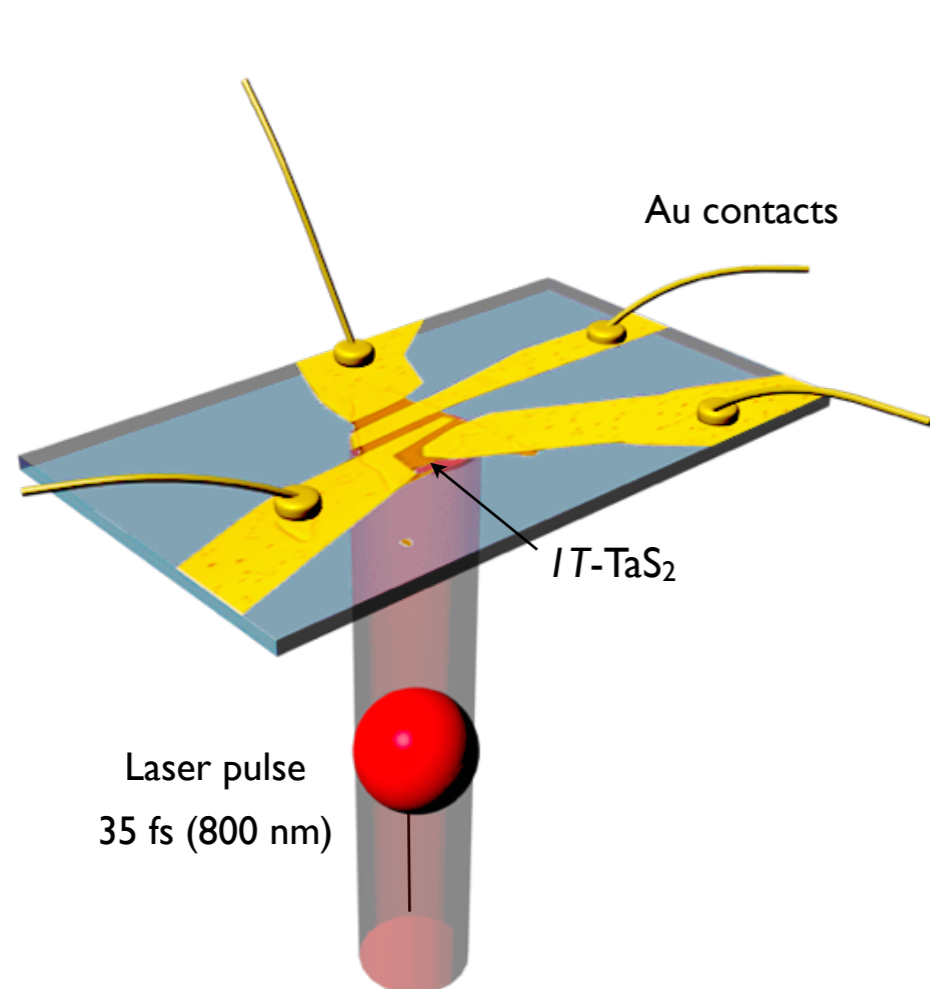
Primoz Kusar



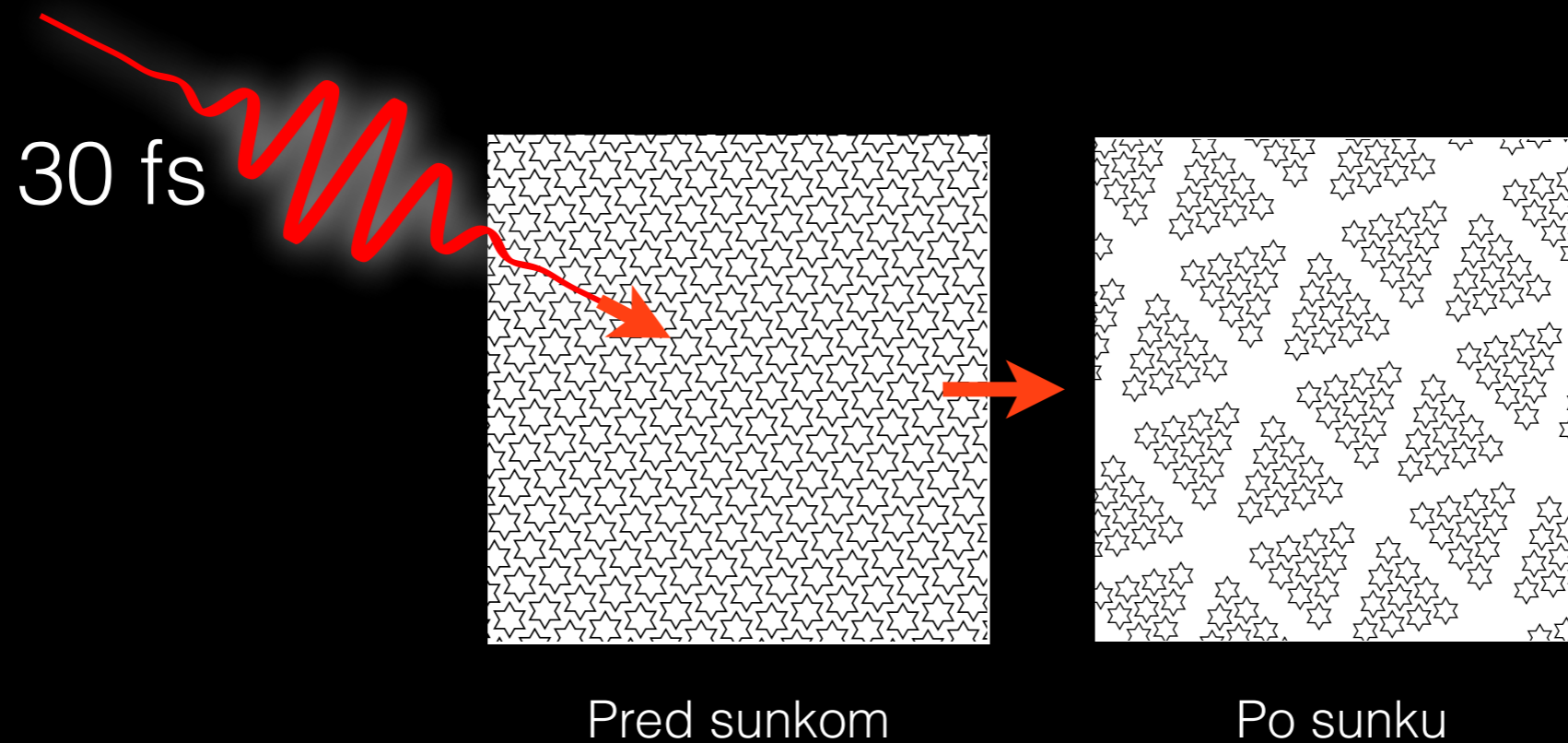
Prelop električne upornosti po 30 fs sunku!



Igor Vaskivskiy

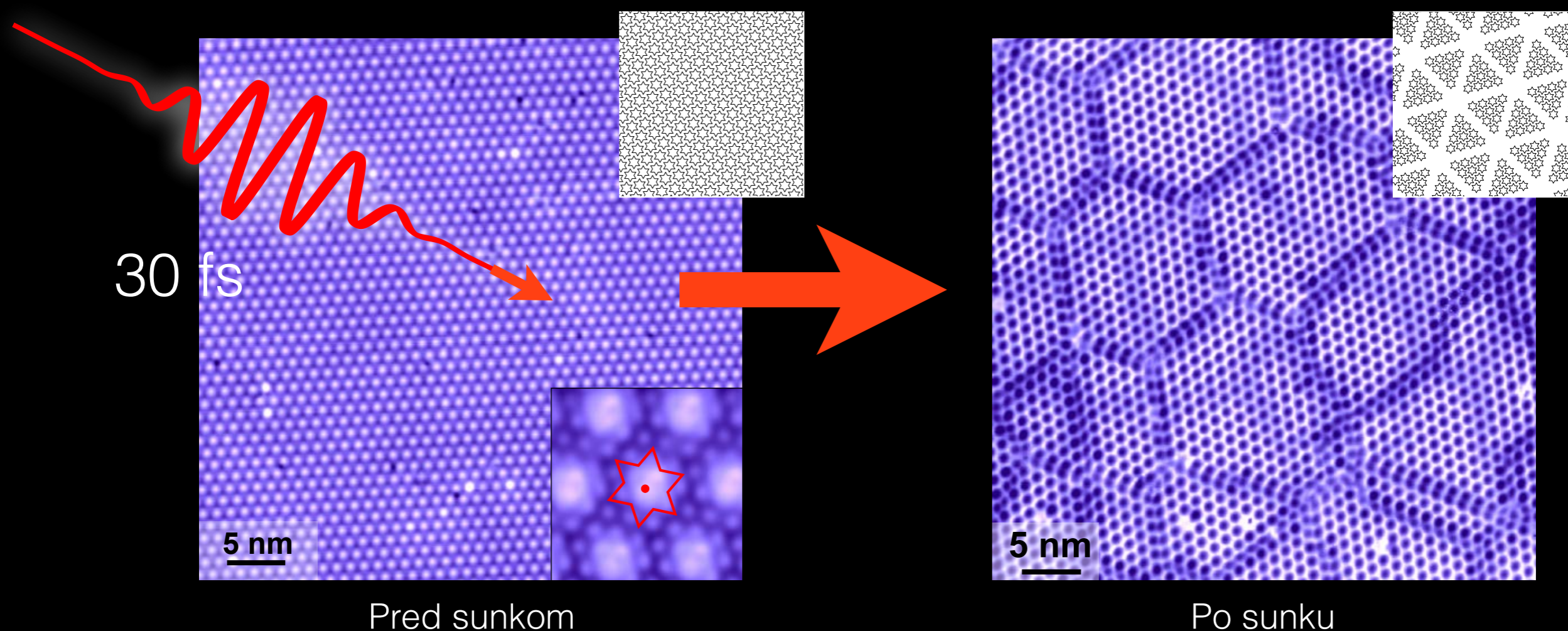


Sprememba elektronskega reda po laserskem sunku



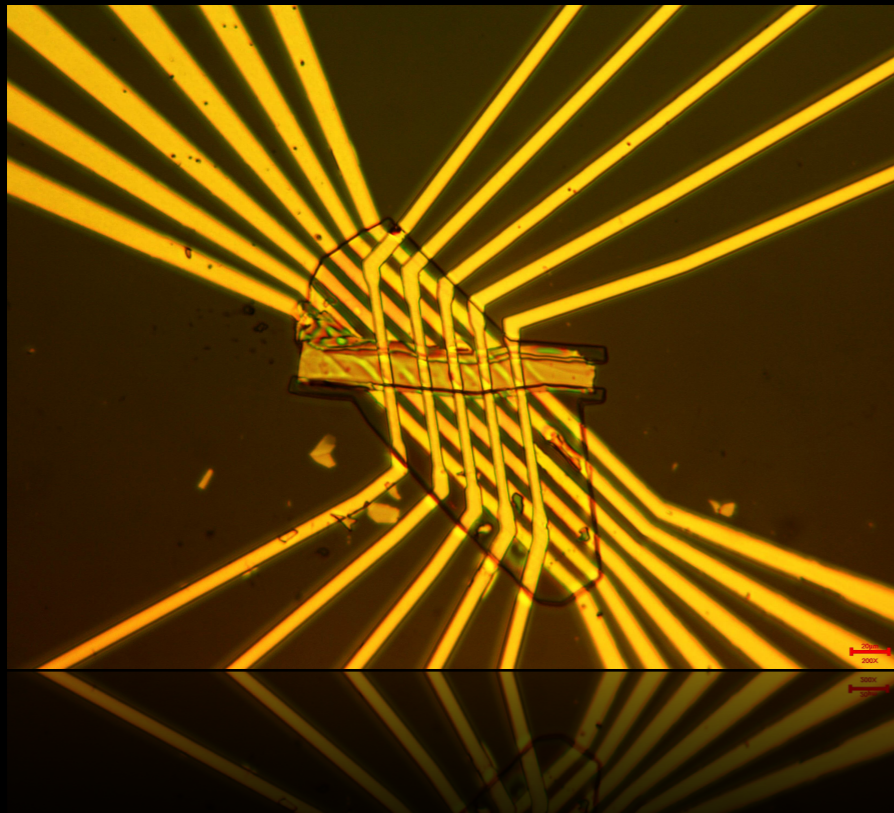
- V sodelovanju z nami je **Stanfordska** skupina pojav potrdila junija 2014.
- **Kitajsko-korejsko-ameriška** kolaboracija potrди pojav maja 2015
- **Korejsko-ameriška** kolaboracija neodvisno potrди pojav septembra 2015!
- Do zdaj že 45 citatov:

paper received enough citations to be in the top 1% of its academic field and surpassed the citation threshold for the field and pu

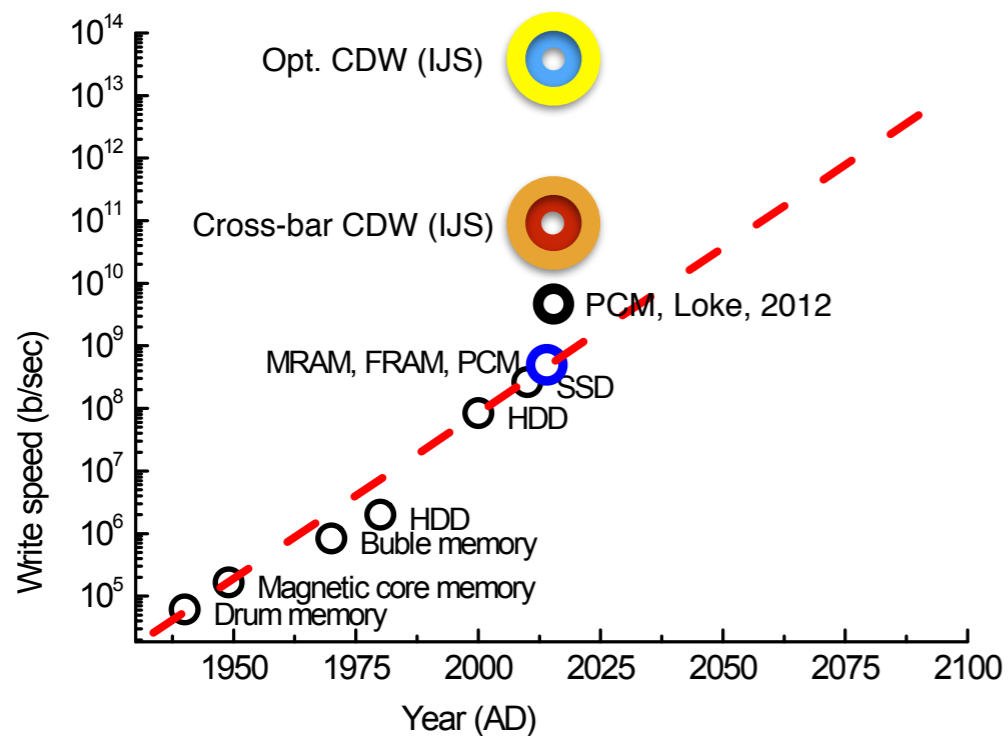


Slike elektronov z mikroskopom na atomsko silo

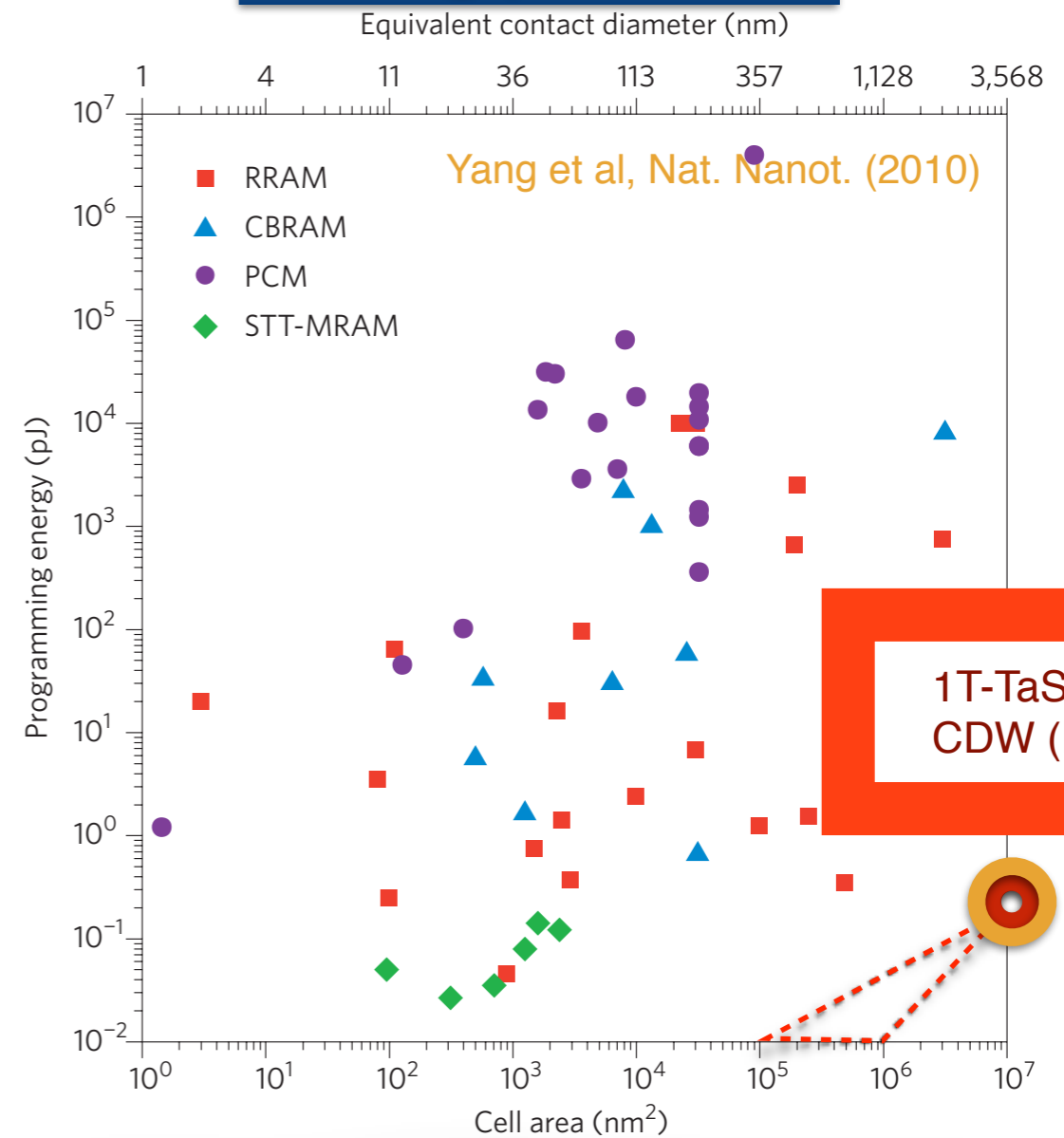
Računalniški spomin



Hitrost preklopa



Energija na bit



Vaskivskiy, I. et al. *arXiv cond-mat.mes-hall*, (2014).
I.V., I.A.M and D.M., UK patent pend., 2014