ERC: proposal preparation & ARRS support schemes
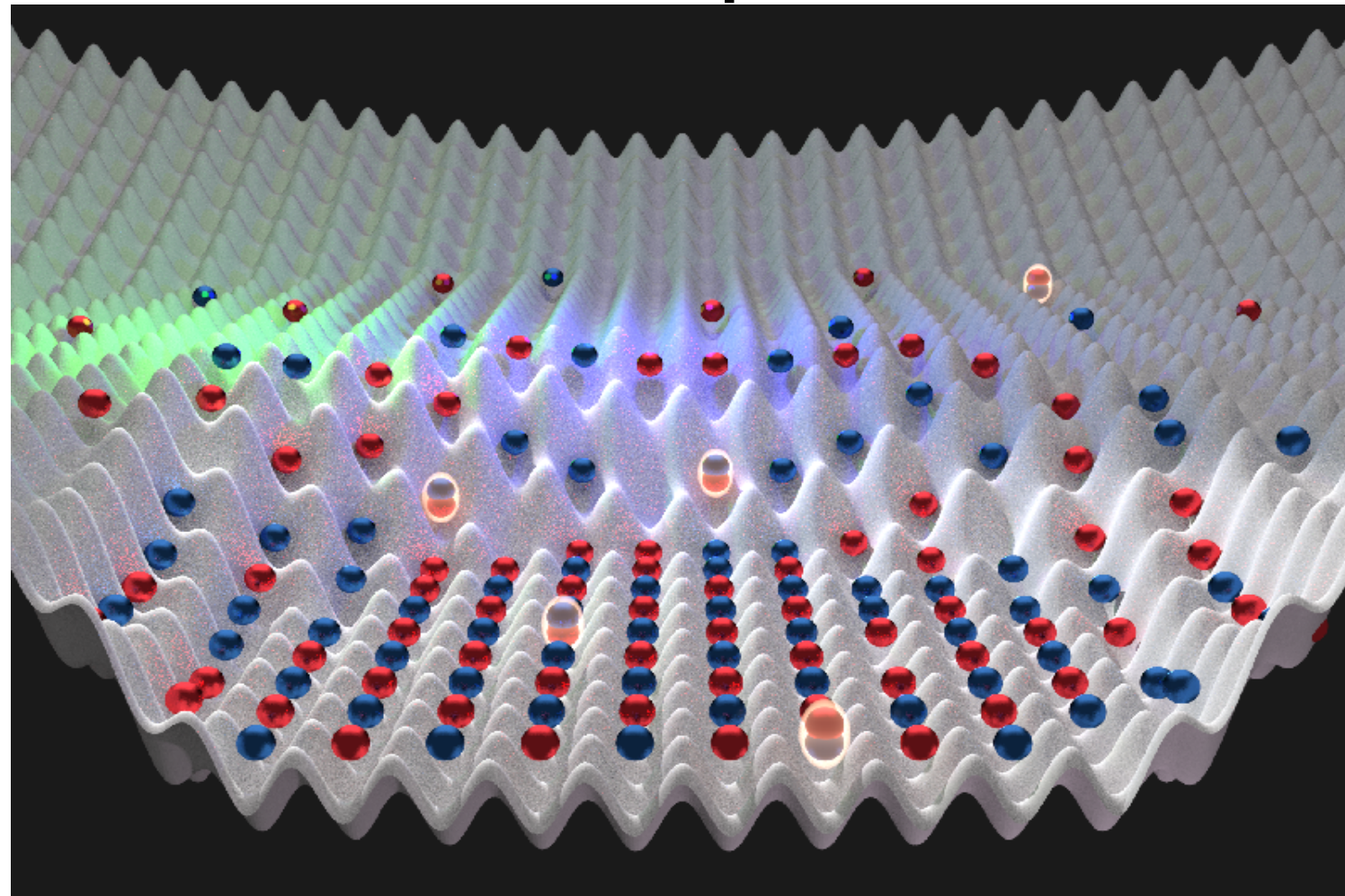
dr. Zala Lenarčič,
Jožef Stefan Institute, Department for theoretical physics
zala.lenarcic@ijs.si

Why, when and how … to write an ERC

ERC project: Weakly driven quantum symmetries (DrumS)
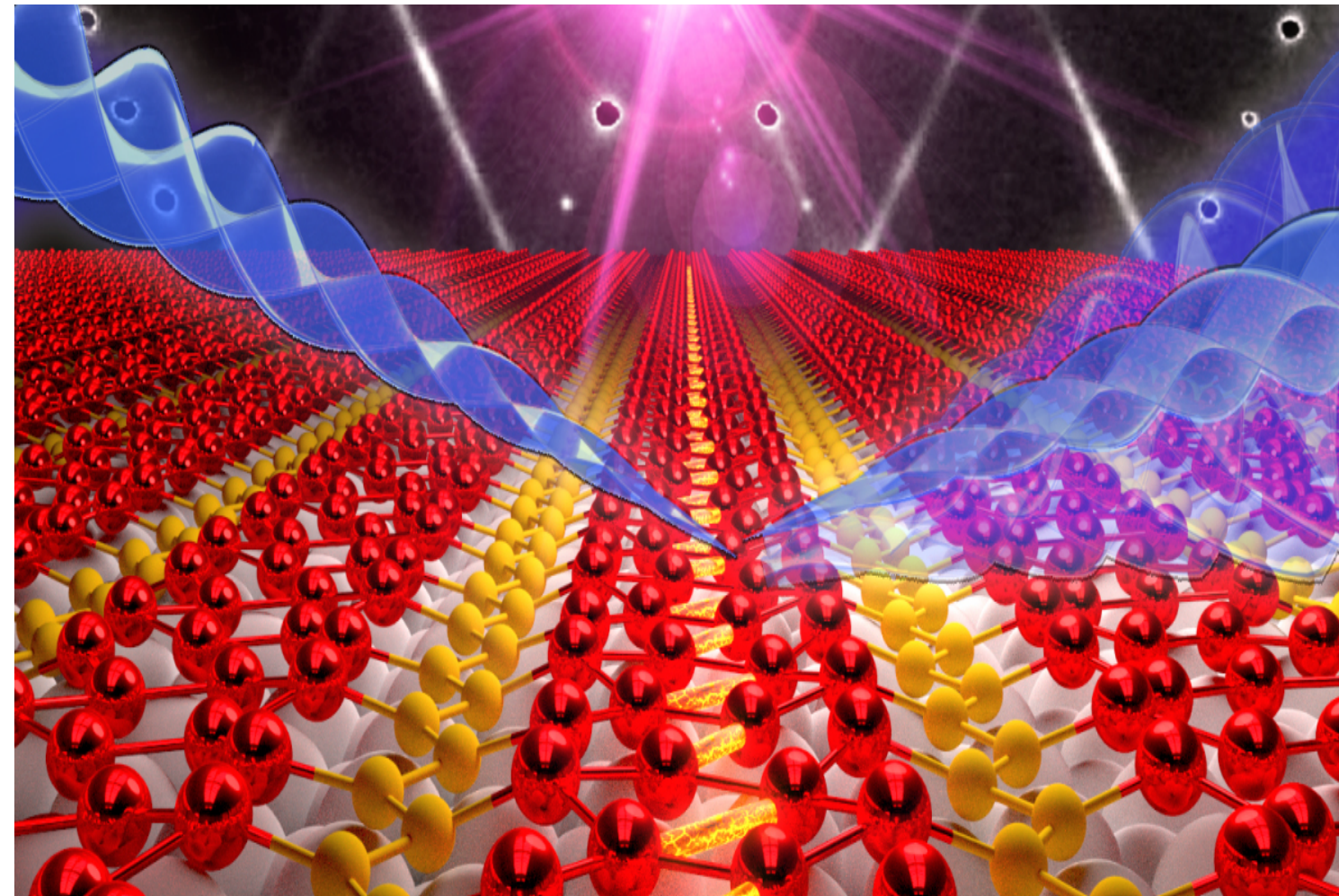**ERC potential: Eta-pairing as a glue**

Quantum systems out of equilibrium
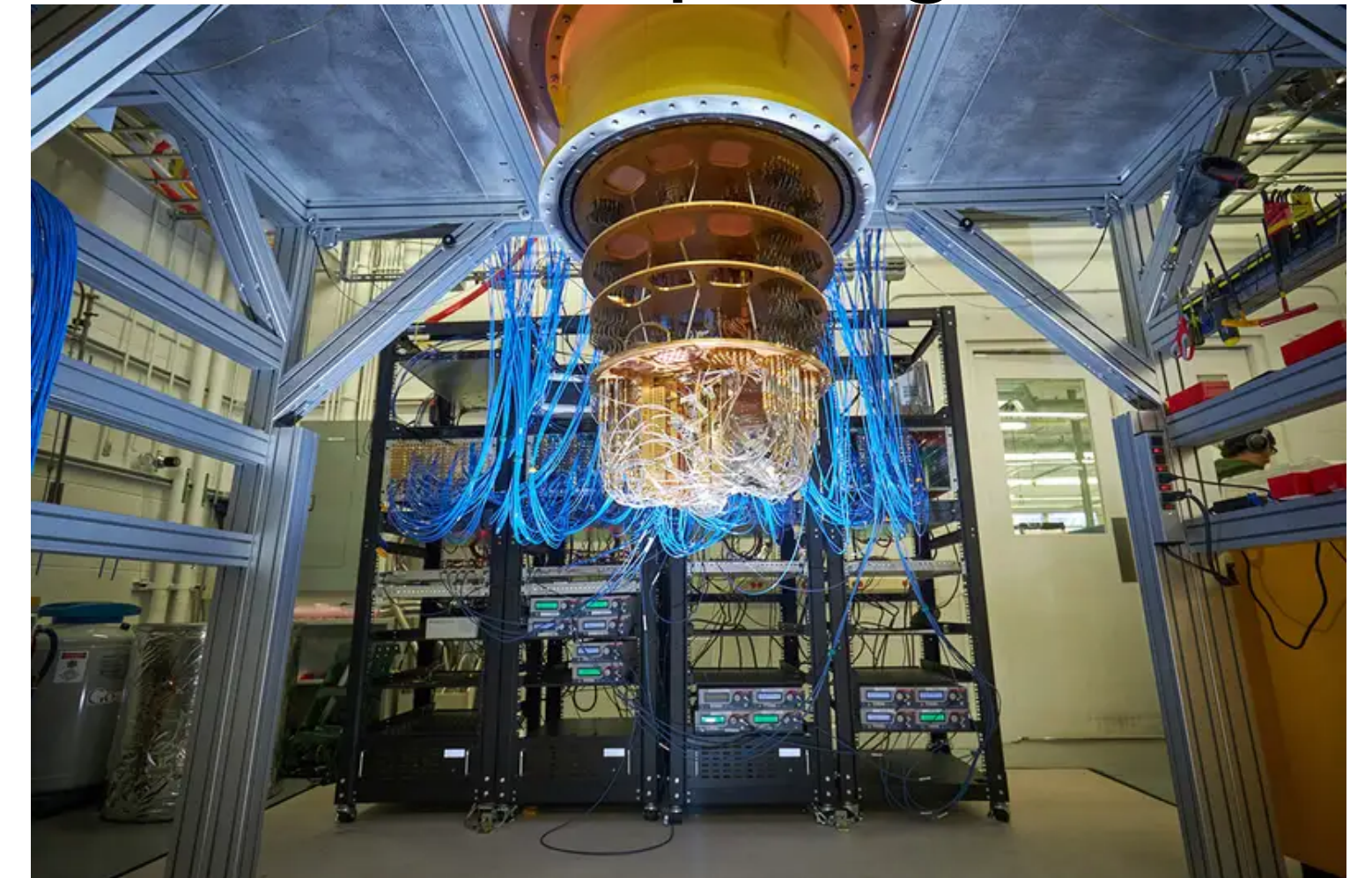
Cold atoms in optical lattice

C. Chiu/Harvard University

Laser excitation of materials

https://www.uni-due.de/sfb1242

Quantum computing

Rocco Ceselin/Google

Basic understanding of quantum matter
New functionalities of materials
Quantum computing

(my) ERC application preparation

My story:
- **PhD at JSI**
- **postdocs: Uni of Cologne (3 years) + Uni of Cal, Berkeley (2 years)**
- **return to Slovenia with Ales Debeljak scheme,**
- **QuantERA project coordinator**

Why to write it (in Slovenia):
- **2nd class employer?**
- **recognition and better conditions: easier to attract better candidates**
- **independent research path in your 'native' (Slovenian) environment**

Not a waste of time:
- **clears and organizes your research interests for next 5 years**
- **you build a research compass for yourself and others**
- **can follow the plan if successful or not**
- **can recycle the application for other smaller grants if not successful**

(my) ERC application preparation

When to write it:
- if you have a good narrative, a complete application 'story'
- don't do it last year within your category

B1, B2:
- one vs two panels?
- took ~3 months
- write with external support or not?
- show it to some ERC panelists

Interview:
- vivid, attractive, concise
- converged to the last version really slowly, many iterations
- involve people with ERC experience: community spirit :)

ERC potencial - ARRS support scheme

ERC project launch:
- **I pushed it ~1 year ahead**
- **need time to find people**

ERC potencial:
- **prepare the grounds for ERC project**
- **gives you a buffer in case some people come earlier**
- **prepare your lab**

I am a theoretician …
- **preparing a numerical library for tensor network calculations**
- **develop numerical neural network technique to be applied in ERC**
- **pre-scanning if another phenomena related to the ERC Objective**