# Script Based EBL- Local Alignment, Beamer, and CJOB with 100 devices

EIBPN BEAMMeeting

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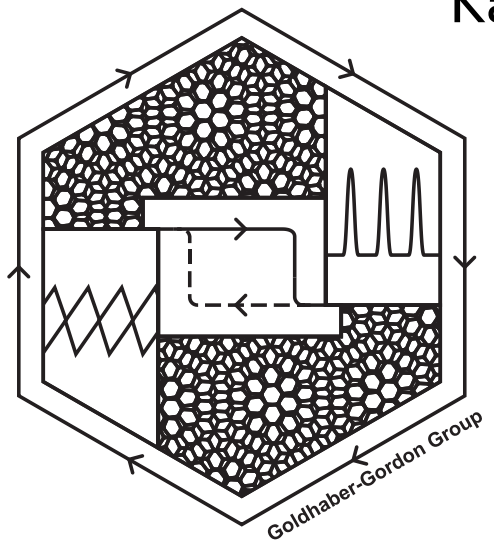


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# Agenda

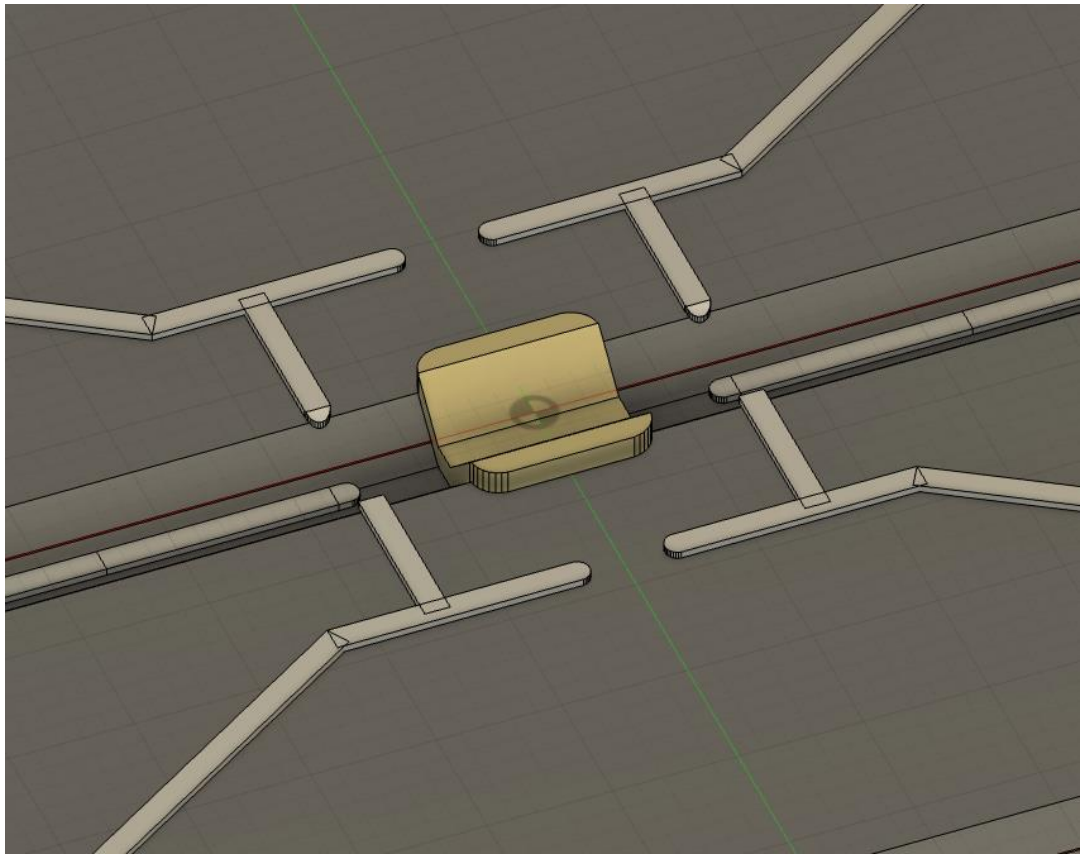
- Short Presentation (5 min)
- Live Demo (15 min)
- Open Discussion with EBL Users!

# Why use scripting to expedite fab?

- **Automation** of repetitive, tedious tasks
- **Streamlining** of multiple independent tasks into executable scripts
- **Accuracy** gains due to reduced chance of user-defined mistakes
- **Faster** fab -> efficiency gains in tool usage and user time

# Our project- process flow

- Fabrication of hybrid metal semiconductor dots for analog quantum simulation
- There are 5 main E-beam writes
  - Alignment marks
  - **Mesa**
  - **Ohmic contacts**
  - **Fine gates**
  - Coarse gates



# Elements of Script-Based EBL

- Design script – use of GDSPy, GDSFactory, or KLayoutPy to generate GDSII
- Fracturing script  - use of BeamerPy for Python-based fracturing, without using a flow
- CJOB script  – use of simple text-editing tools in Python to generate EBPG CJOB files

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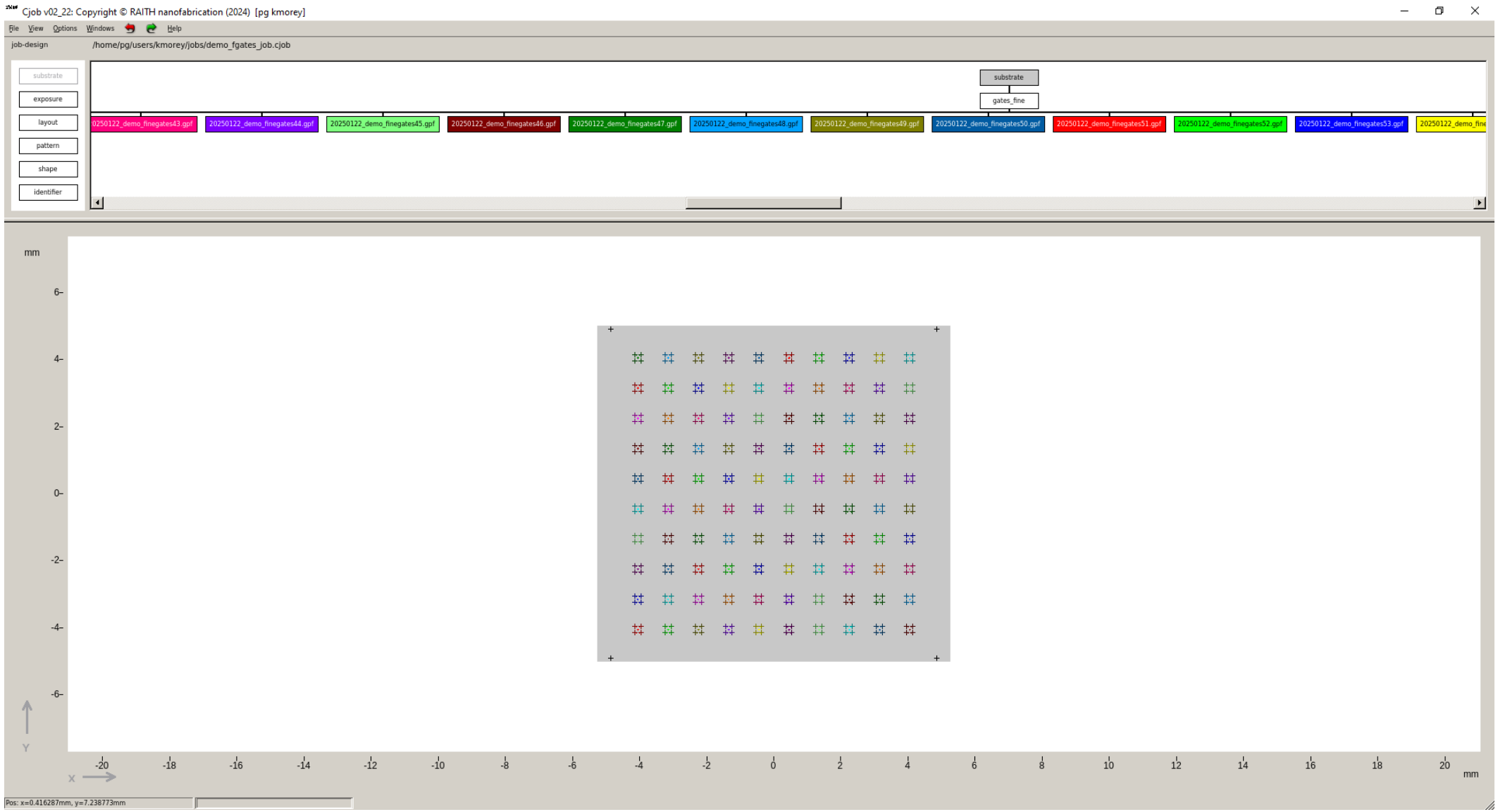
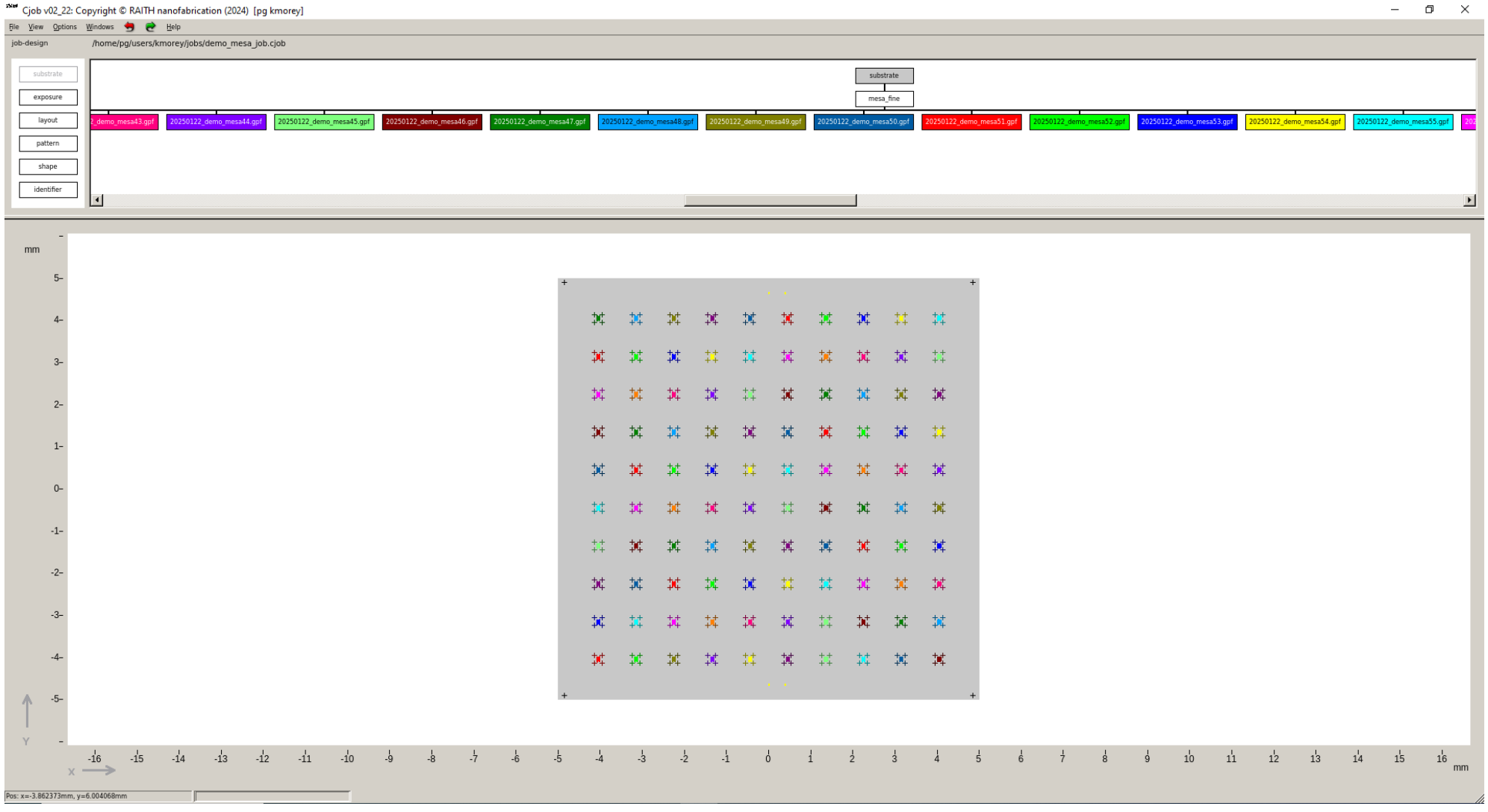
- Fracturing and CJOB scripts-– focus of the demo

# Live Demo!

# Result in CJOB



# Mesa Job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