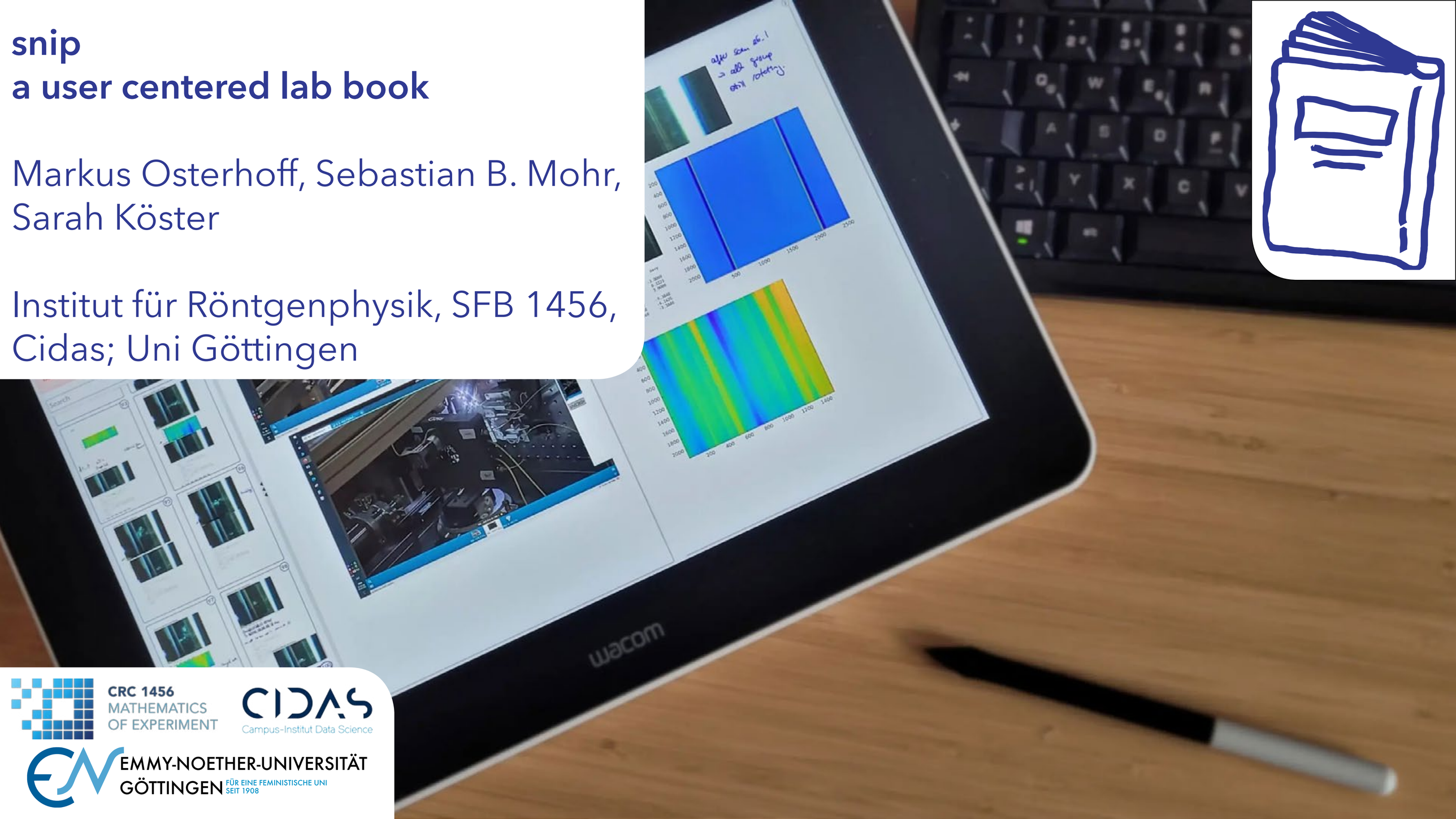
snip
a user centered lab book

Markus Osterhoff, Sebastian B. Mohr, Sarah Köster

Institut für Röntgenphysik, SFB 1456, Cidas; Uni Göttingen



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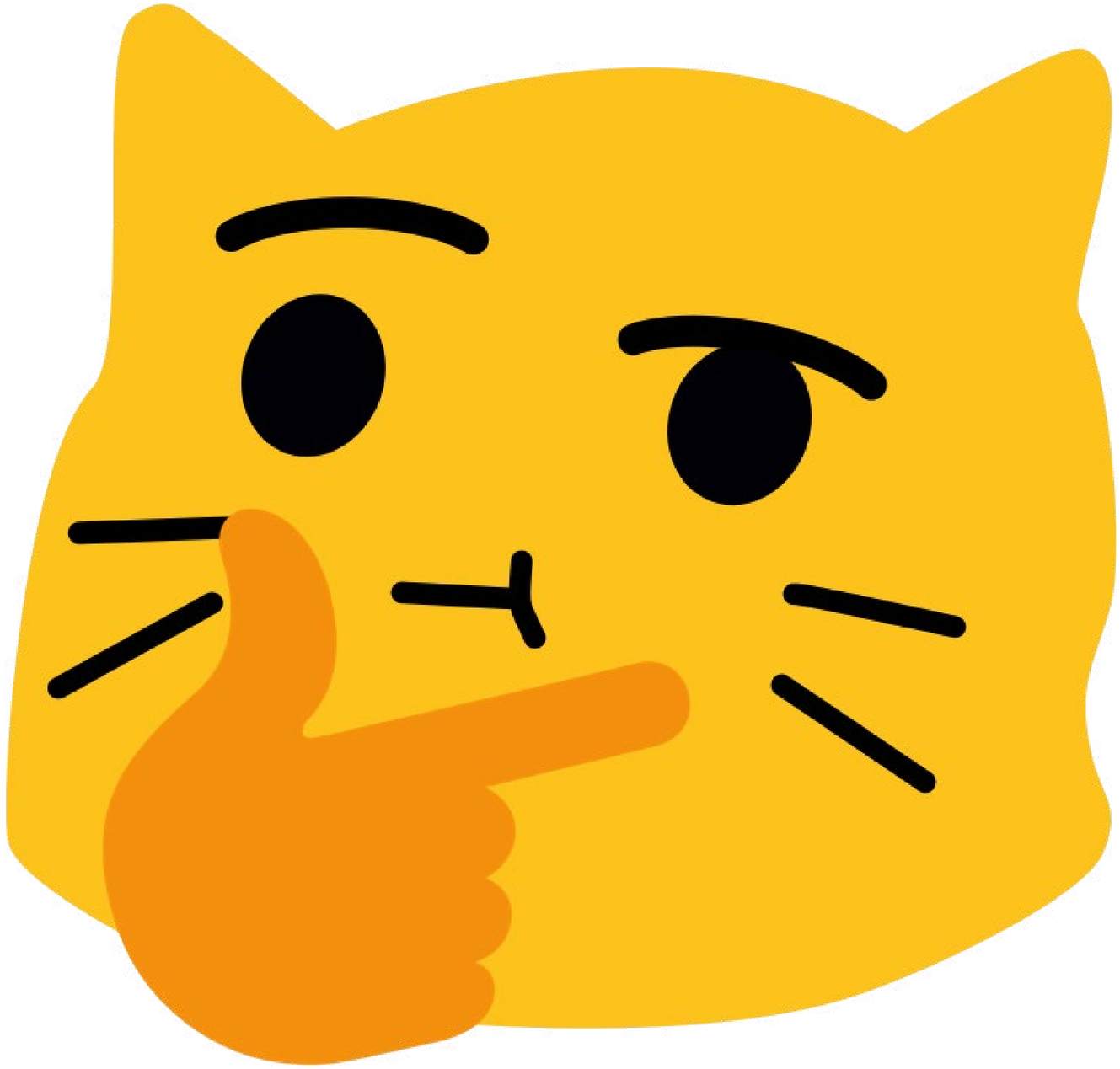
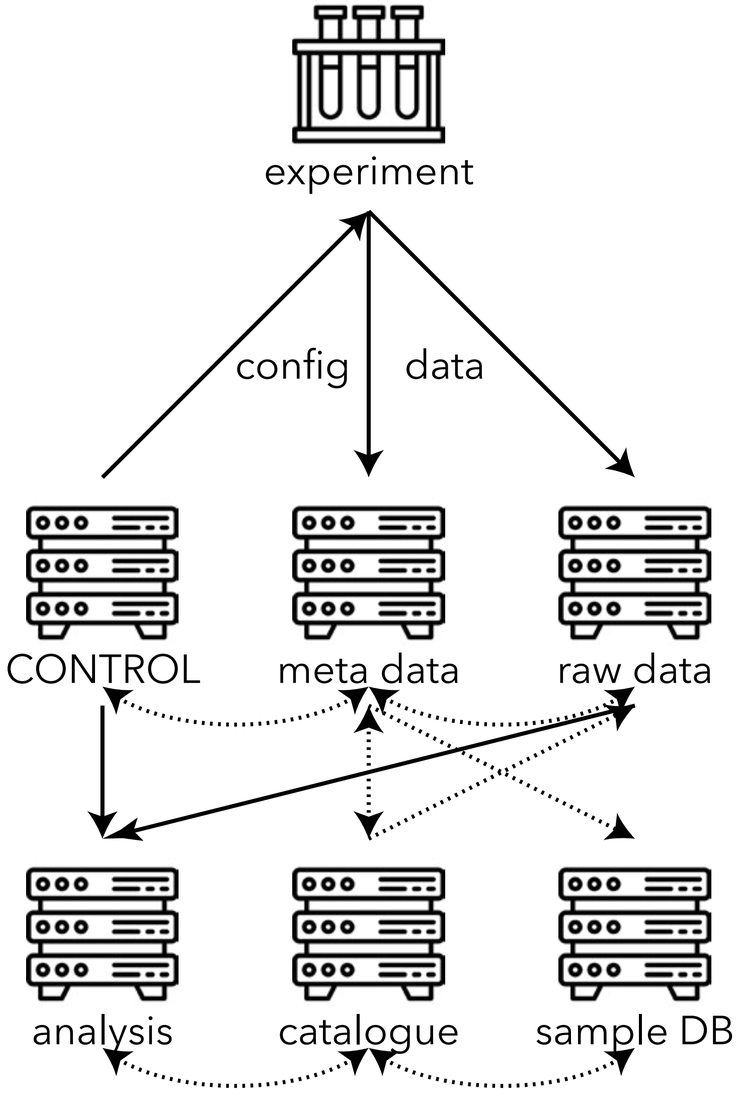
Experiments

Rui Guimarães:
https://masto.pt/@rguimaraes/111154874261632873

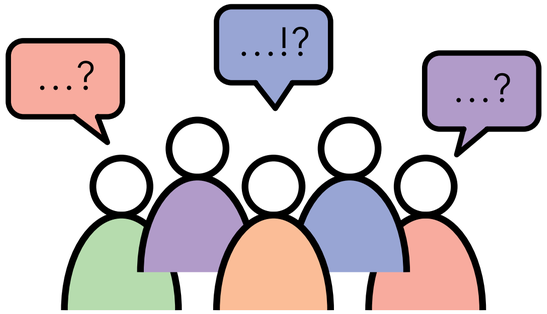
Automatic data flow – why (another) ELN?



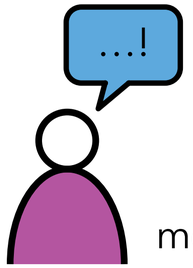


snip: Discussing the Experiment

discussion

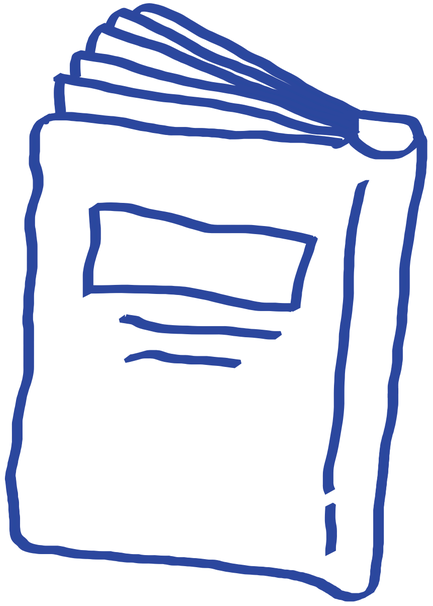


users discussing with colleagues



mobile access

internet



server

positions, parameters

images, links

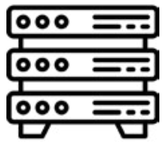
experiment

config

data

CONTROL

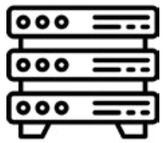
meta data



raw data

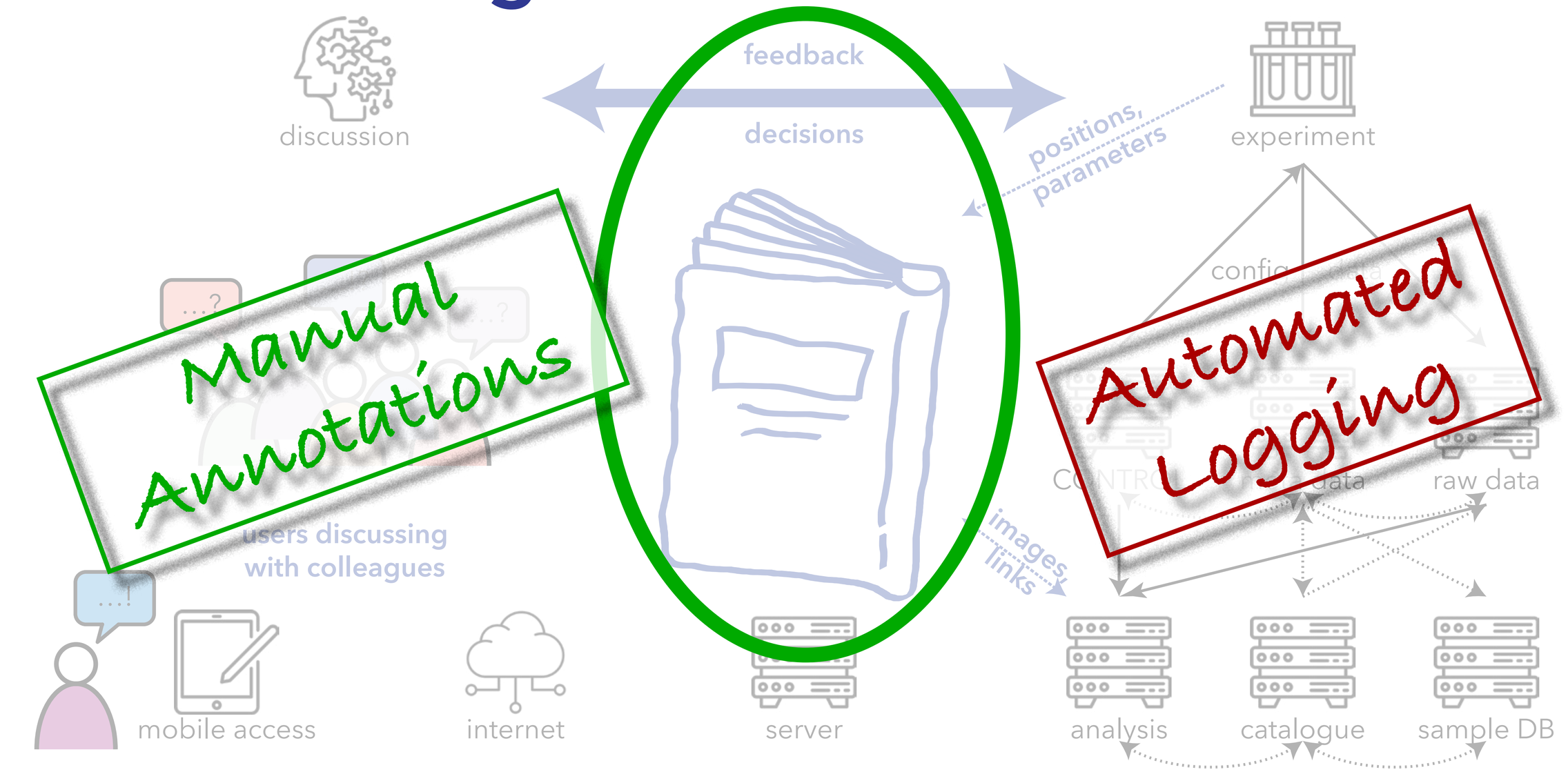
analysis

catalogue



sample DB

Documenting Discussions and Decisions



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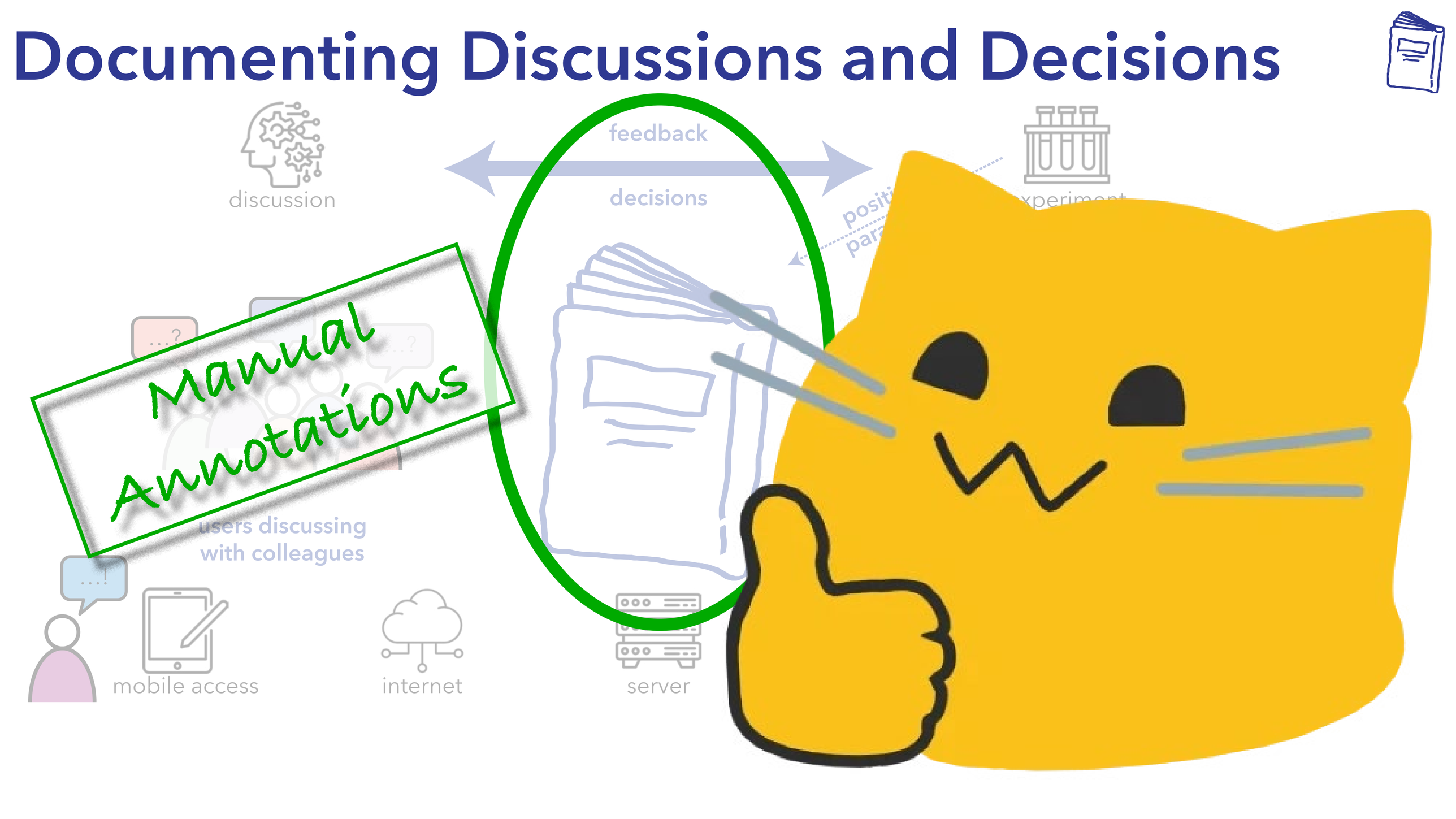
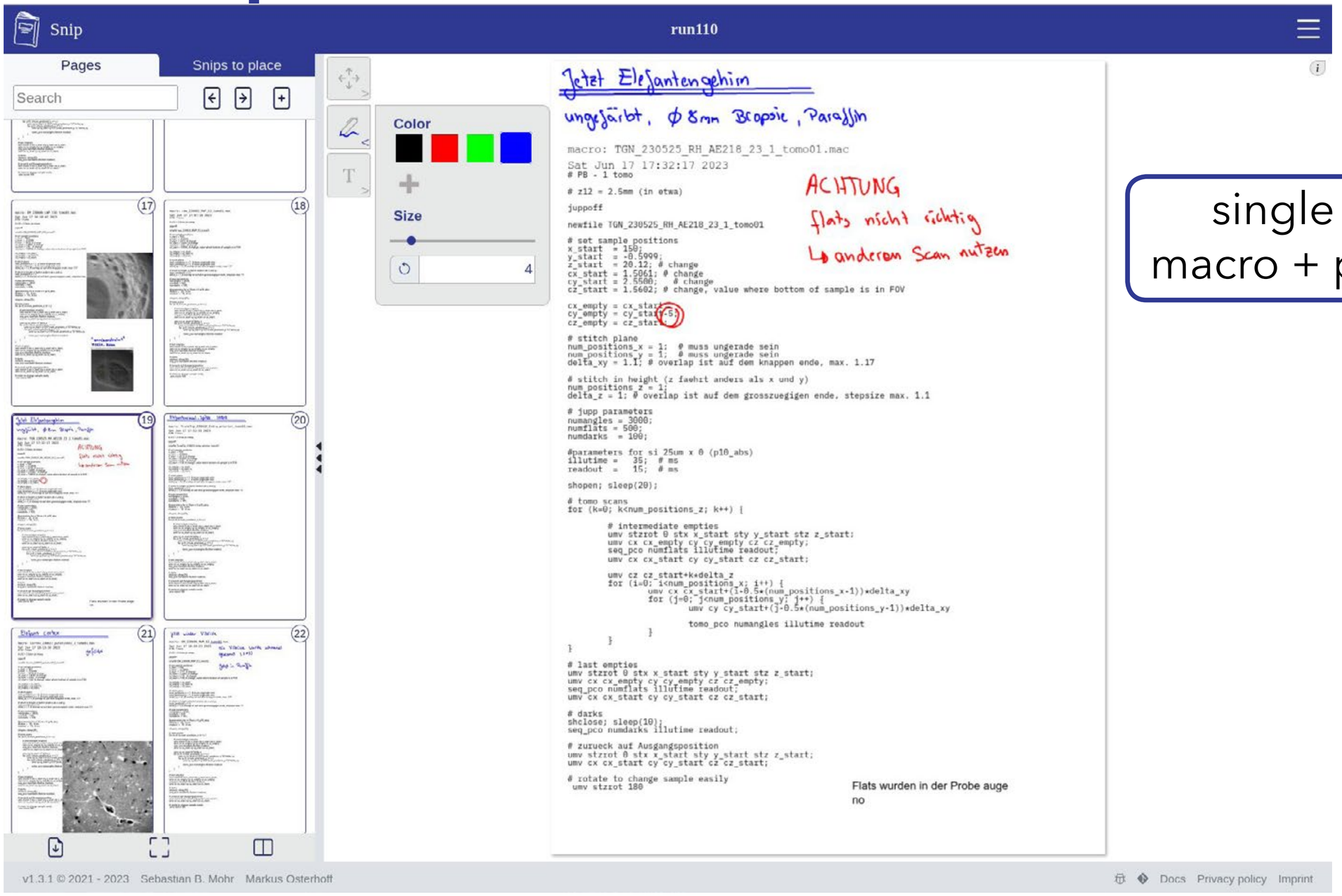


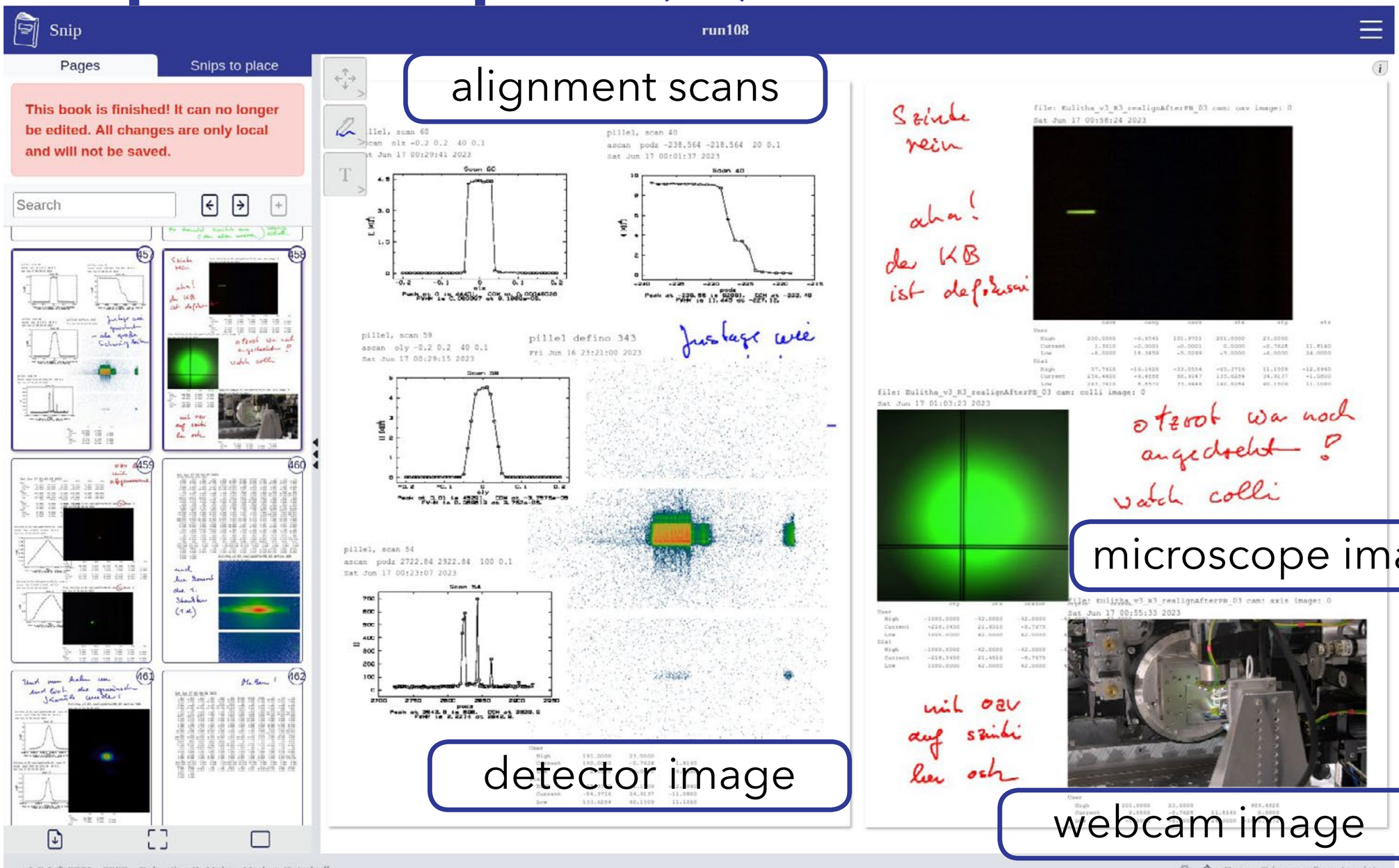
Snip – Examples (2)



page previews,
incl. live update

single page:
macro + pen entry

Snip – Examples (3)



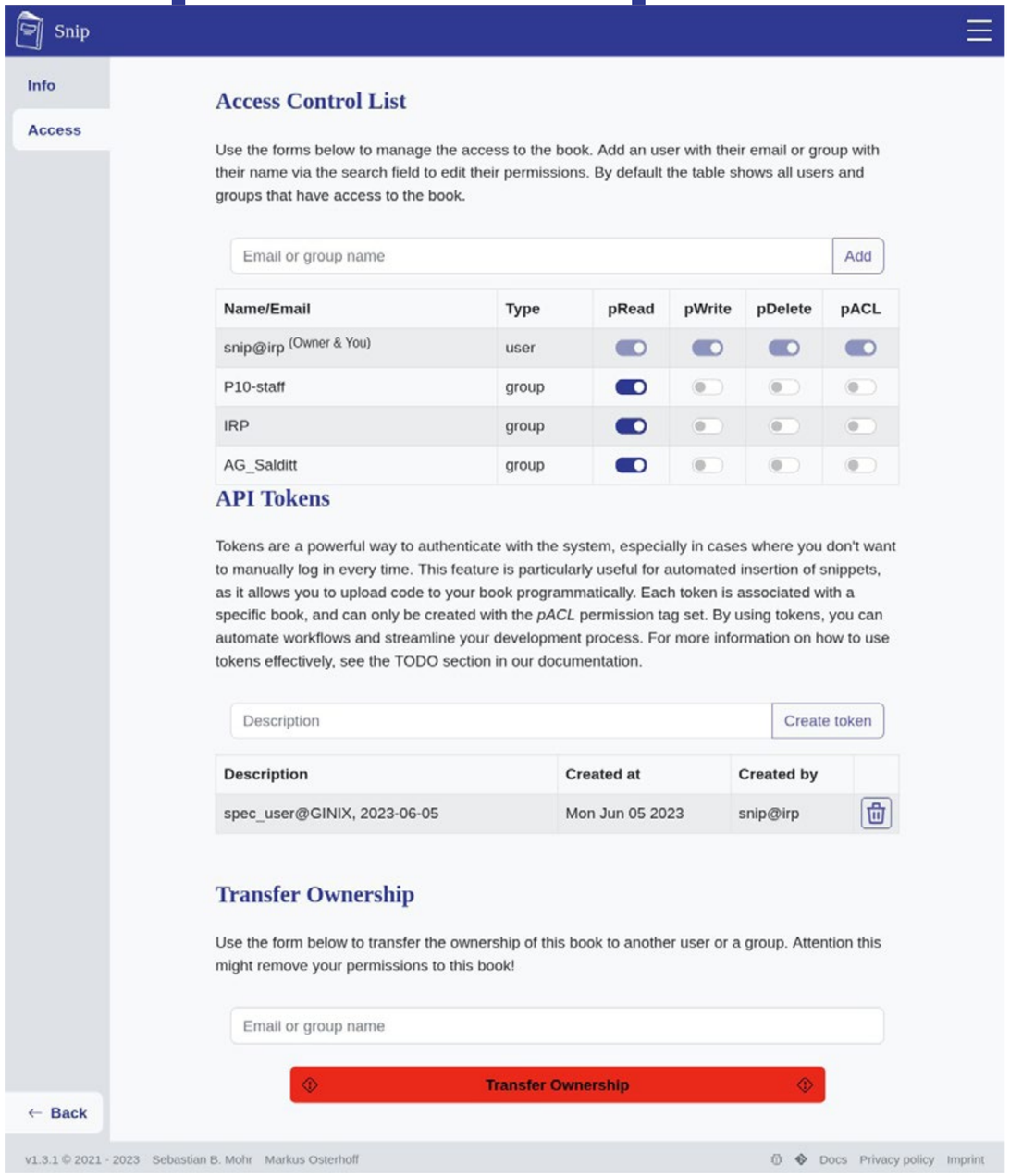
Berlin dialect:
This is smooth!

Snip – Examples (3)

„Dit is schmofte!“

Drawing a Creative Collage of Computer-Generated Contents with Real-Time Communication to Document Discussion and Decisions

Snip – Examples (4)



ACLs

define:

- who can read/write a lab book?

for:

- individual users
- groups

API token

- to send snips

public token

- for anonymous read only access

Snip – Examples (6)


```
{
    "type": "array",
    "data": {
        "type": "array",
        "snips": [{
                "type": "uprp/spec/timestamp",
                "data": {
                    "epoch": 1687857636.88979,
                    "text": "Tue Jun 27 11:20:36 2023"
                },
                "view": {
                    "font": "Courier New",
                    "size": 12,
                    "wrap": 800,
                    "y": 0
                }
            },
            {
                "type": "uprp/spec/motors",
                "data": {
                    "motors": [{
                            "name": "stx",
                            "limit_min": -5.9301,
                            "value": 99.07,
                            "limit_max": 200.0699,
                            "raw_limit_min": 140.6284,
                            "raw_value": 35.6283,
                            "raw_limit_max": -65.3716,
                            "unit": ""
                        },
                        {…},
                        {…}
                    ],
                    "show": "*"
                },
                "view": {
                    "layout": "wm",
                    "font": "Courier New",
                    "y": 0
                }
            }
        ],
        "legacy": true
    },
    "view": {}
}
```


JSON API

Third party software:

- create JSON encoded snips
- POST to http endpoint
- with bearer token for authorization

User:

- pick up the snip,
- place it onto the page,
- annotate

snip: current status / plans

Feature	Status
live update, working collaboratively	**yes** (since Nov 2020)
free-form input; pen entry, sketches; images	**yes** (since Nov 2020)
machine-readable data, data ingestion via API	**yes**
permissions (r/w; API token; r/o token)	**yes**

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hyperlinks to external systems	**under discussion**
federated login, SSO	**needs more time**

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federated login, SSO	**needs more time**
hiding contents	could be implemented
automatic creation of lab book / initial contents from beamtime metadata	could be implemented

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Let's try it now!

login: h@cker
Pass: demoDPG

open book:
demoDPG

https://s.gwdg.de/Ana2cz

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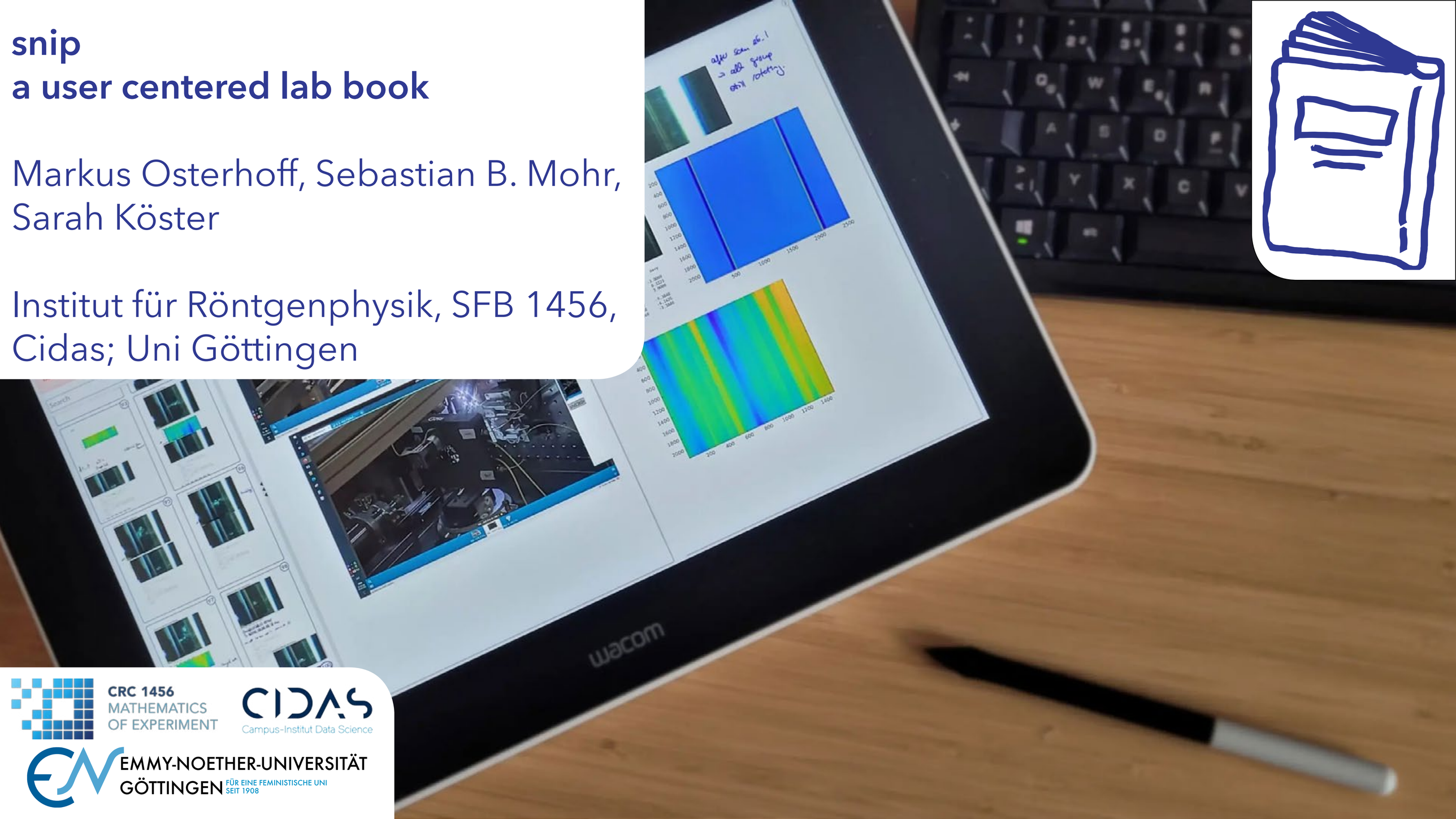

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