**A** Optical trap

- SARS-CoV-2 RNA
- Unfolding
- Refolding
- 5' handle
- 3' handle

**B** Fluorescence experiments

- Optical trap
- Confocal laser
- Focal plane

**C** Constant-force experiments

- Distance, nm
- Time, s
- Counts, #

**D** Force-ramp experiments

- Force, pN
- Distance, nm

**Legend**

- Streptavidin
- Biotin
- Digoxigenin
- Anti-dig ab

**Experiments**

- Constant-force experiments
- Fluorescence experiments
- Force-ramp experiments