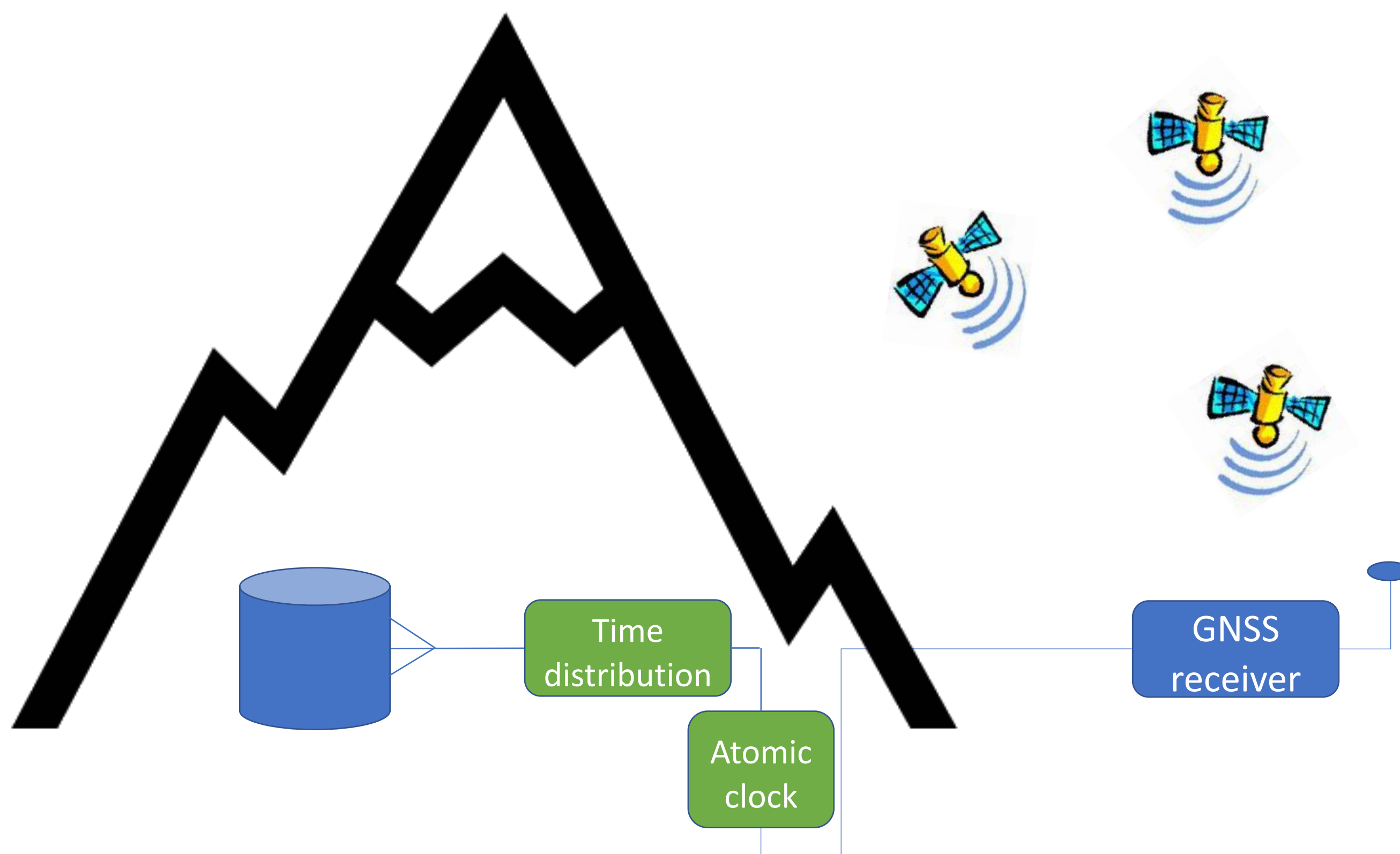


# Slow control and clock integration for HK

Mathieu Guigue (with inputs from Stefano Russo)  
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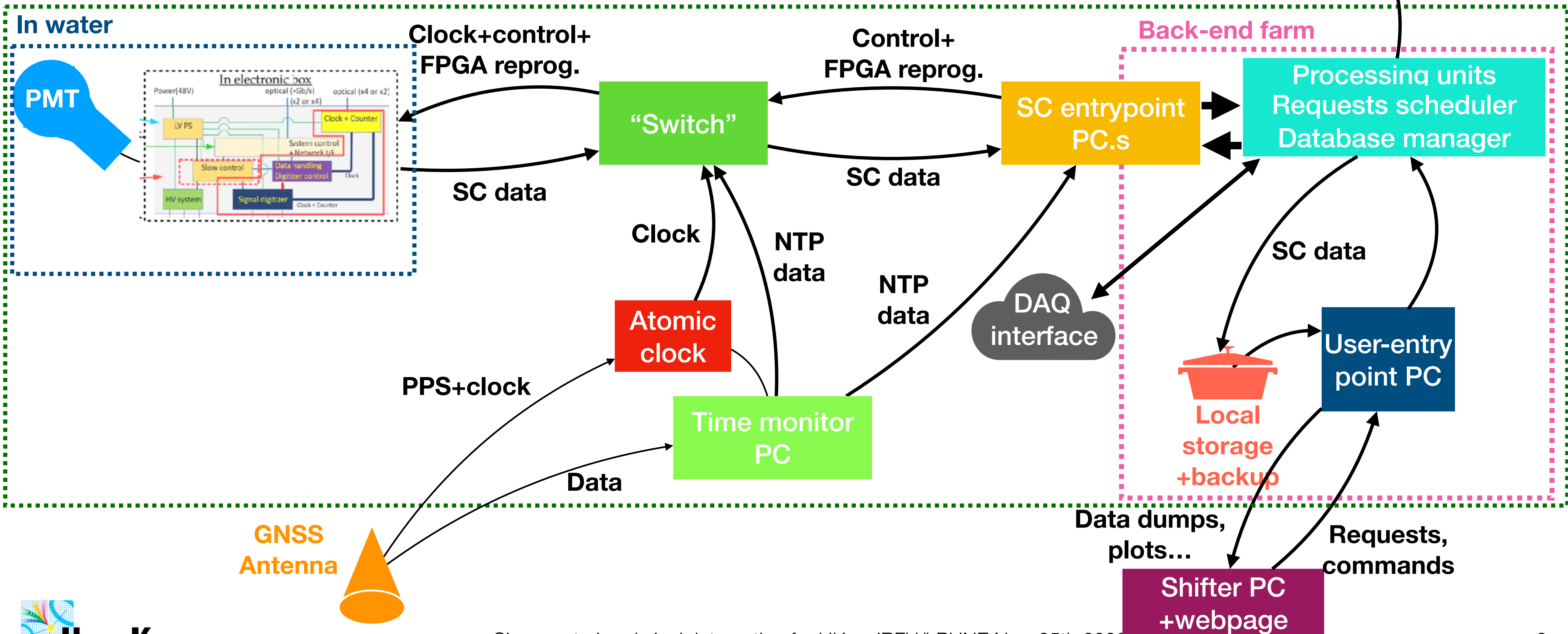
## Major components:

- Global Time synchronization to UTC using GNSS receiver (correction of received times)
- Synchronization with local atomic clock
- Distribution of PPS & 125 MHz frequency and **commands** to PMT front-ends
- **Reception/treatment/storage of slow control data from PMTs**

# Slow control overview

Cavern

In water





Lots of equipments: PCs, cables, switches, racks, disks...

→ Investigate the overall requirements in hardware

→ Back-end farm would dominate imo

Lots of software pieces to do → can be extended as much as one wants

Questions:

- what critical pieces are purely related to the clock distribution system?

- what would we like to take on top of these?

→ very open afaik, so we could take the leadership for many years to come (and only the interesting tasks if too big...)

**A lot of opportunities with high visibility!**

→ Especially if new person-power/collaborators or if one current item of interest (clock, chips...) not approved (money, collaboration choice...)