Theory I.G.

Closing session

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InterOp - Sesto - 19 june 2015

Theory sessions

Theory session on Monday

- presentation of SimDAL W.D. (D. Languignon)
- discussion

DAL Session

- presentation of SimDAL W.D. (D. Languignon)

SimDAL

- approved as a W.D. of the DAL W.G.
- suggestions during discussions
  - need examples in the Data Access part

Next steps :

- update the W.D.
- reference implementations & validator
- implementation note with precise examples

Plan for coming months

Reference implementations

- Madrid (Carlos)
- Paris (David)
- Trieste if possible (Marco)
- maybe Gerard

Client / Validator

- Paris + others

Implementation note

Goal : RFC end of 2015

Why it has been so long

- Simulations are as heterogenous than observations (even more …)
- A Standard designed for the future:

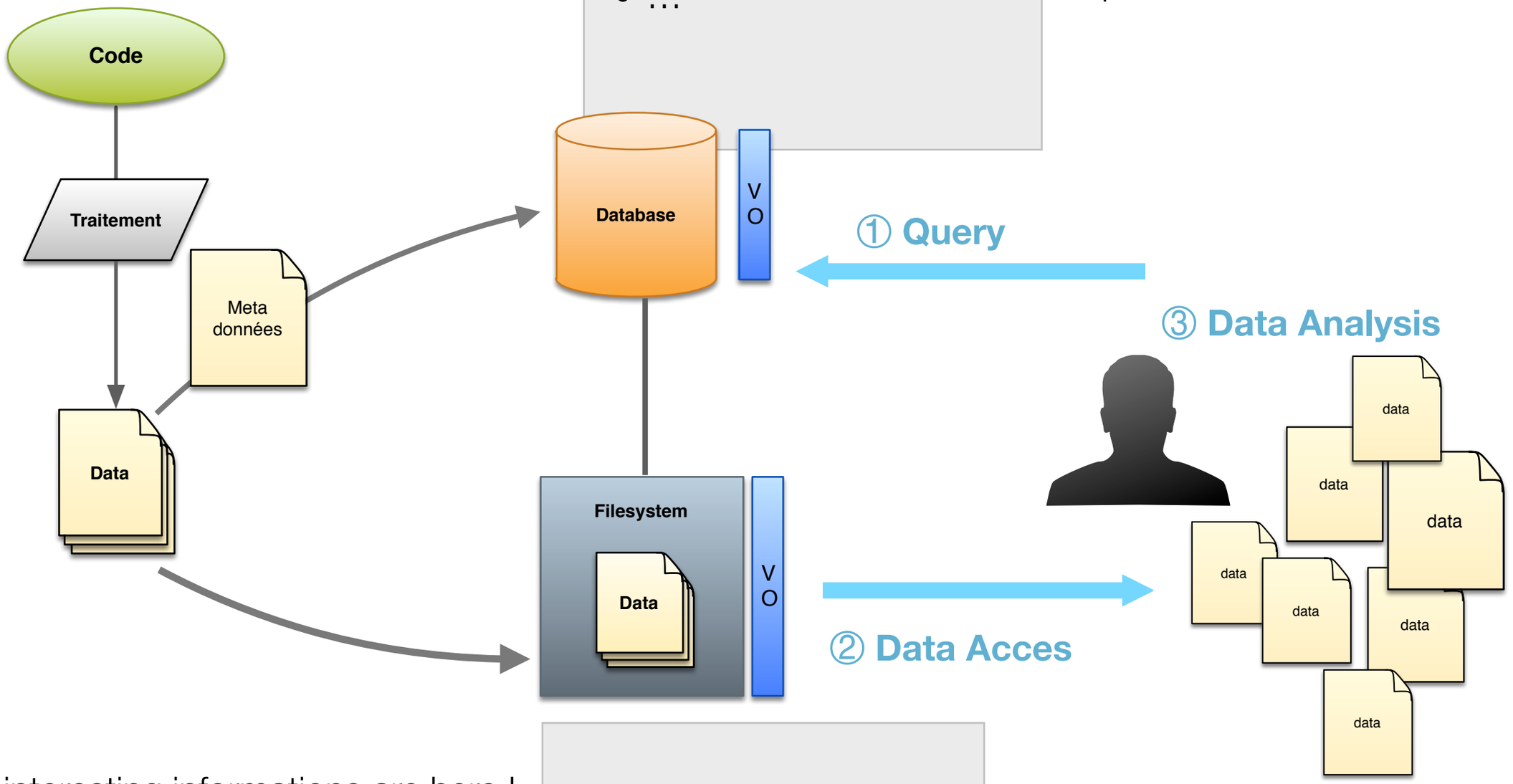
Massive Data

=> lot of R&D have been necessary to find solutions for some Big Data issues

=> SimDAL designed after this R&D to be sure the standard would be compatible

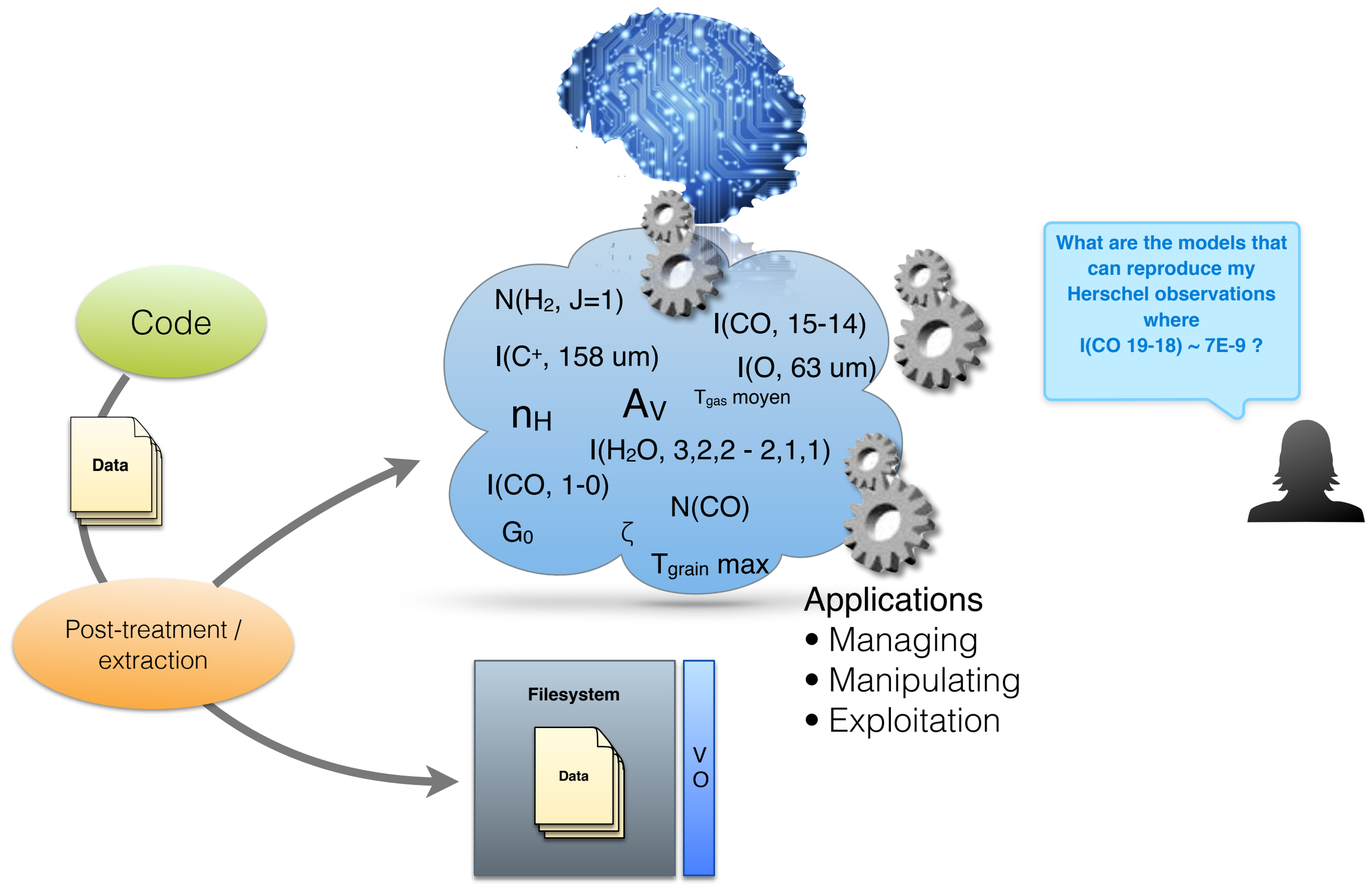
Metadata
Input Parameters
- Temperature
- Mass
- …

~ tens quantities



All the interesting informations are here !
Voluminous data

- Results of simulations



- 10 queriable quantities
- thousands models
- tens thousands to quantities

→

- hundred thousands queriable quantities
- thousand models
- millions / billions quantities

High dimensionality databases

In SimDAL:

- TAP-like but not TAP / ADQL

  => do not imply the use of relational databases

  Ex: not adapted for large number of heterogeneous columns (high dim. databases)

- Pagination / streaming to transfer informations