

# PyMEOS

A Python binding to the MEOS C Library



# Presentation Outline

1. Introduction to MEOS & its conceptual model
2. PyMEOS & Python classes
3. Use cases demonstration
  - PyMEOS examples
  - PyMEOS + MobilityDB
  - PyMEOS + MovingPandas

# MEOS Architecture



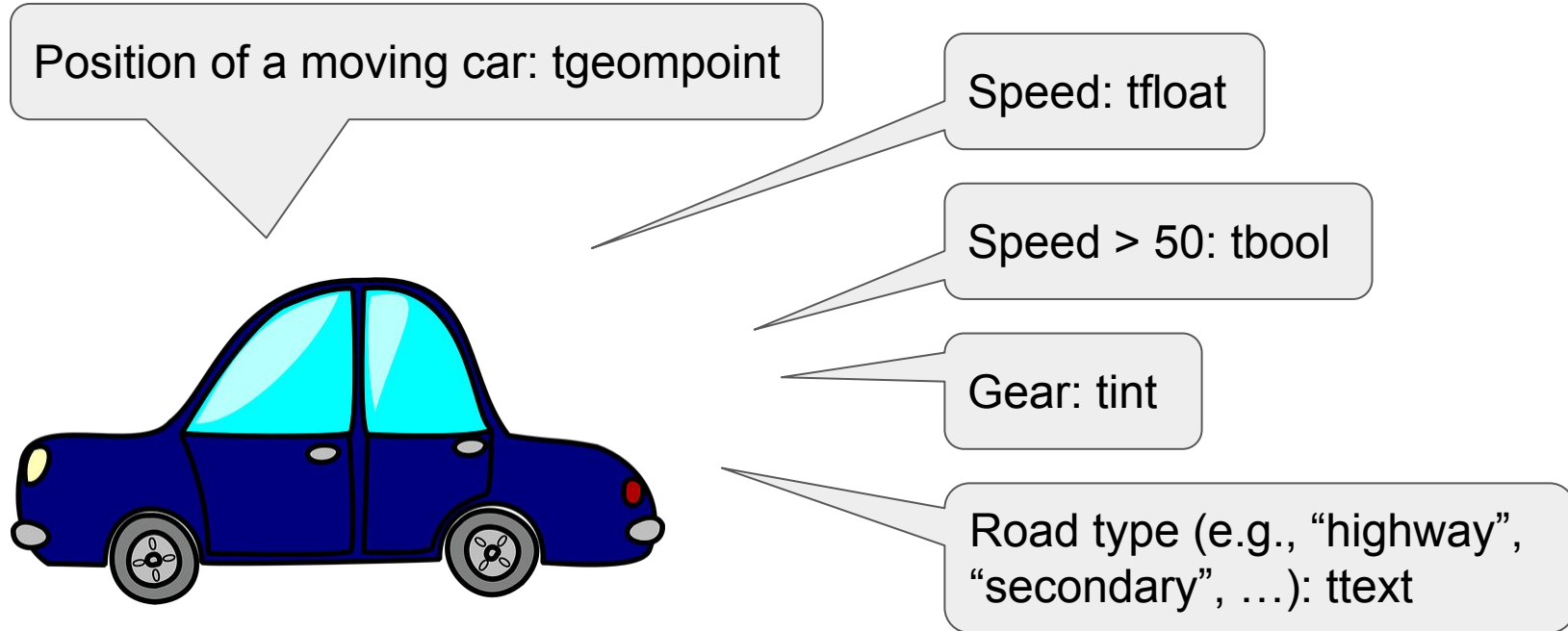
More...



MEOS (Mobility Engine, Open Source) is a C library and its associated API for manipulating temporal and spatiotemporal data

# MEOS Conceptual Model

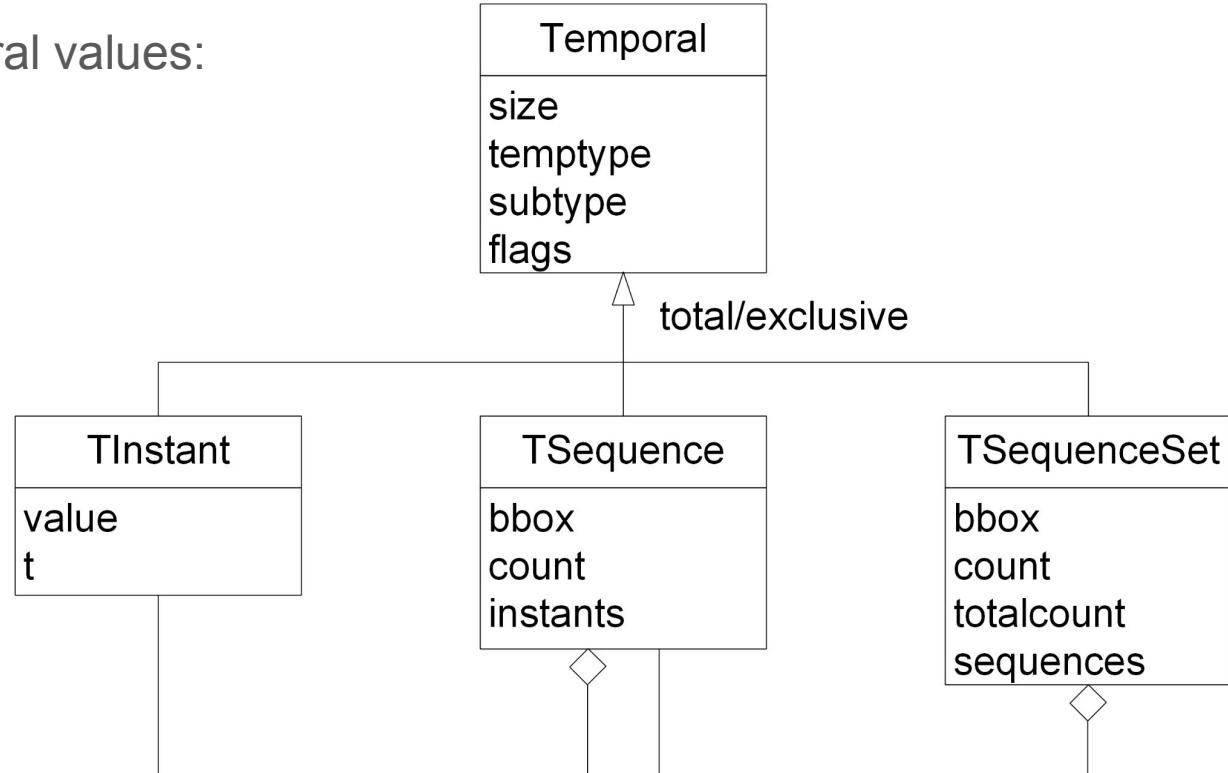
MEOS provides temporal types, which represent the evolution on time of values of some element type, called **base type**, like bool, int, float, text, geompoin and geogpoint



# MEOS Conceptual Model

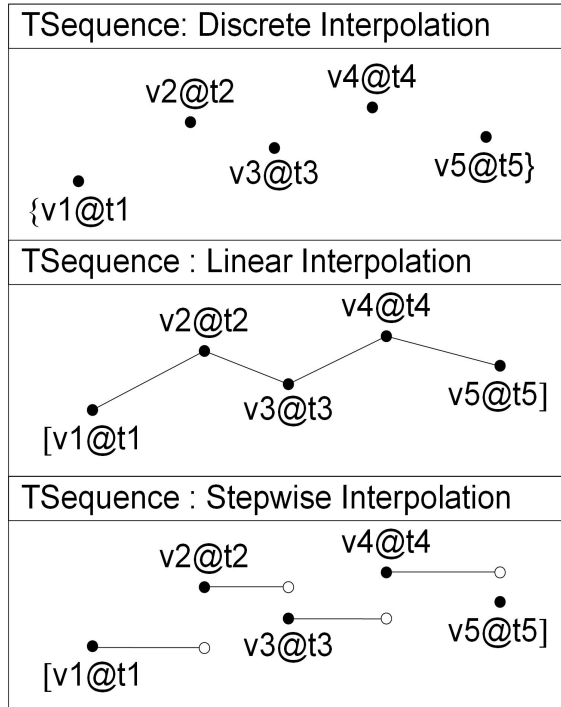
3 subtypes of Temporal values:

- Instant
- Sequence
- Sequence set

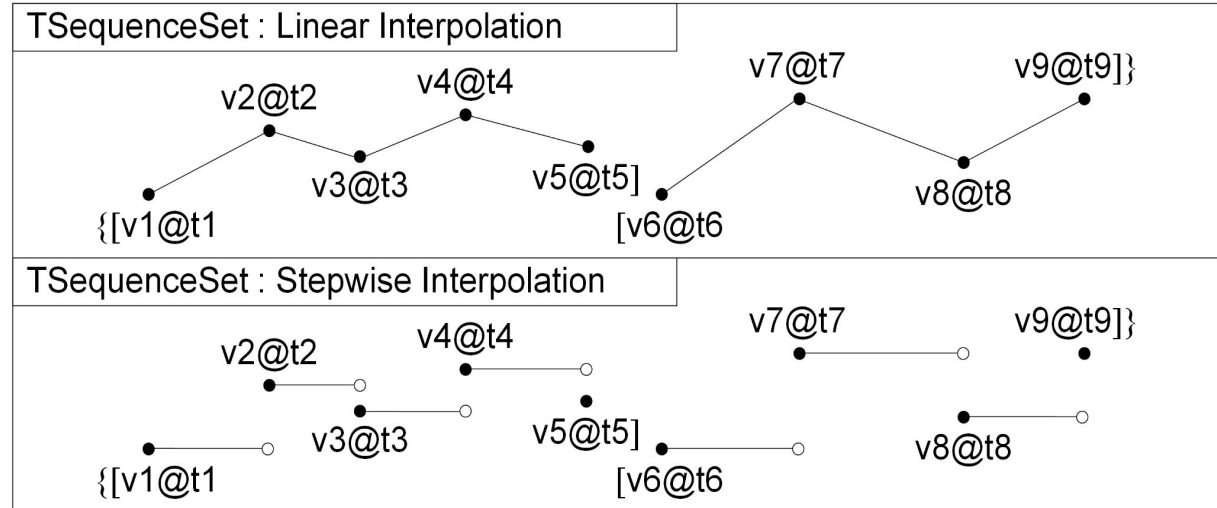


# MEOS Conceptual Model

time

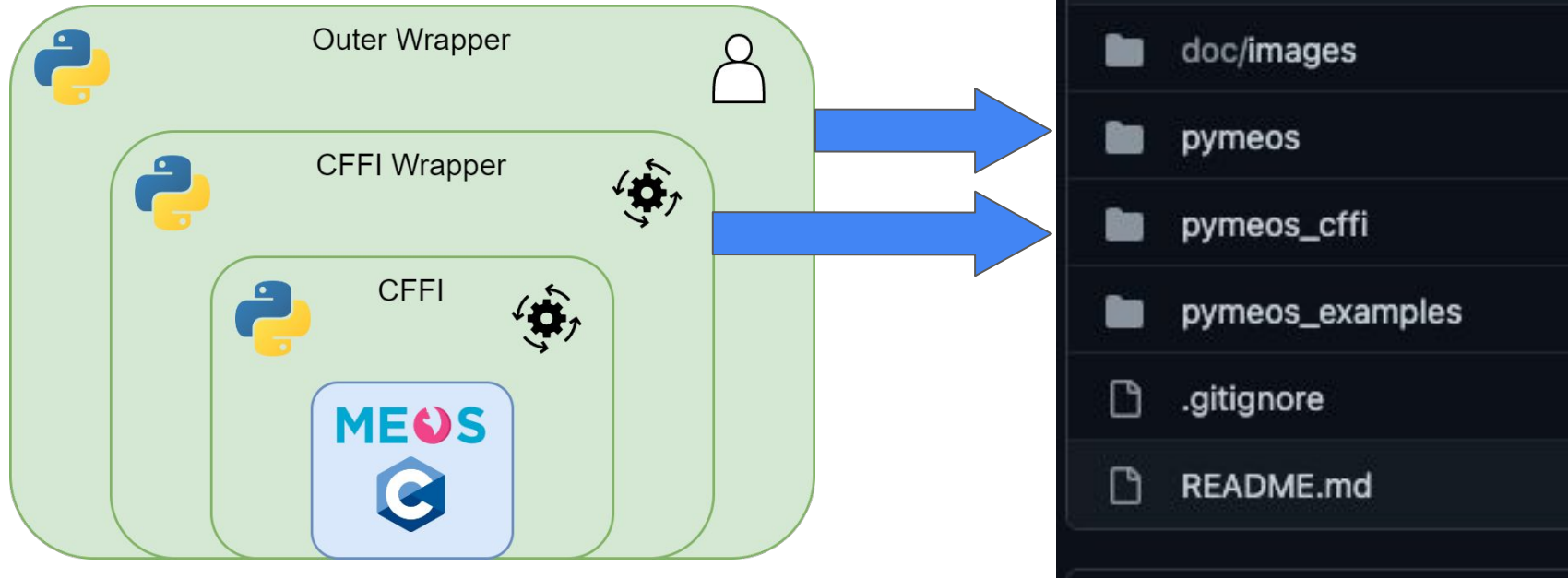


time

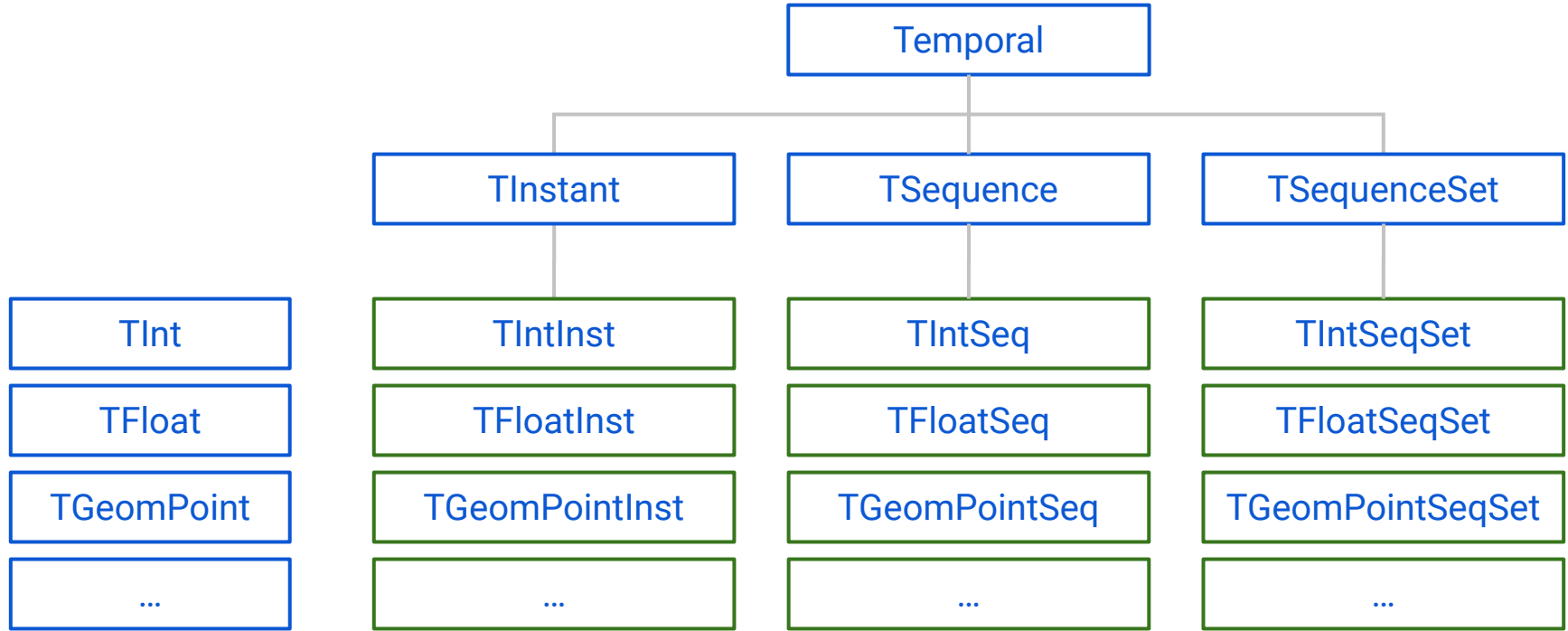


3 interpolations: Discrete, Linear, Stepwise

# PyMEOS - Built with CFFI



# PyMEOS Classes





# Use Cases Demonstration

<https://github.com/Diviloper/PyMEOS-Demo>