– *PROJECT FOR ZTF* –

THE SOFTWARE STRUCTURE

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THE IDEA – NOT AN ACTUAL CODE

BUT A FRAMEWORK, I.E. A BUNCH OF OBJECTS AND TOOLS

WHAT — **A Framework, i.e., a bunch of objects and tools**

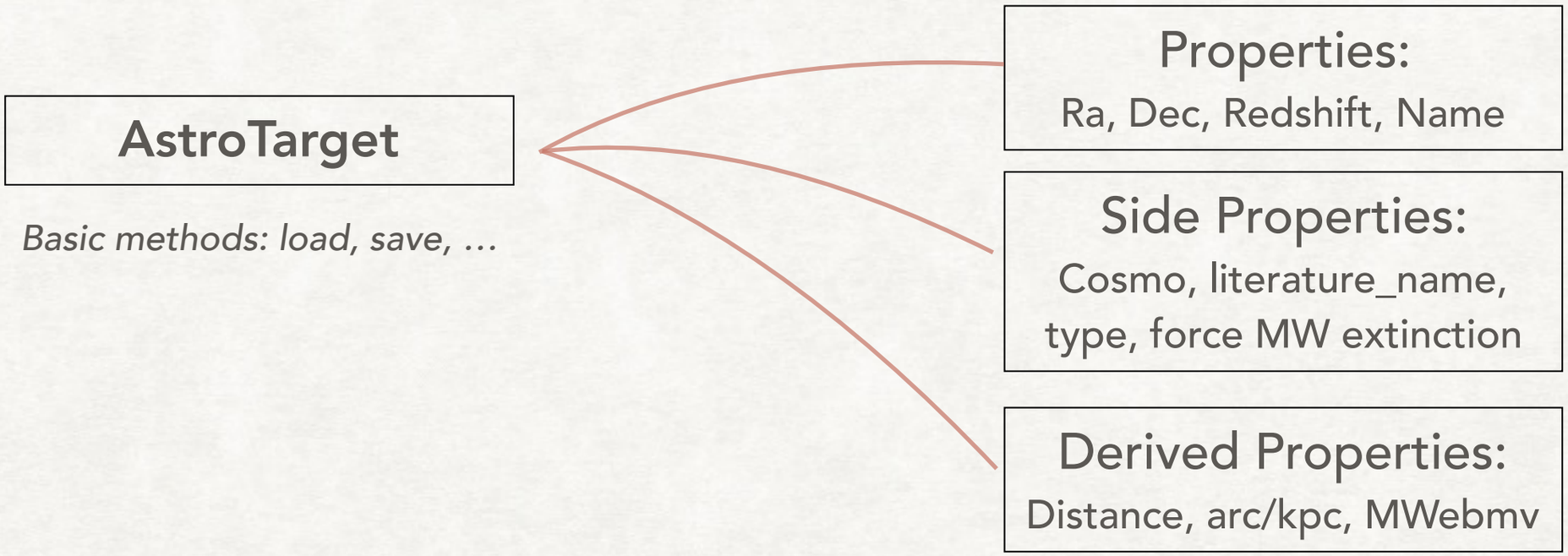
WHY — Well defined objects and structures enable to do **fast, consistent, and scalable analyses**

WHEN — **Now**, while the data are not there yet, is the moment to build this framework and agree on **what is what and what goes where and what do we need ?**

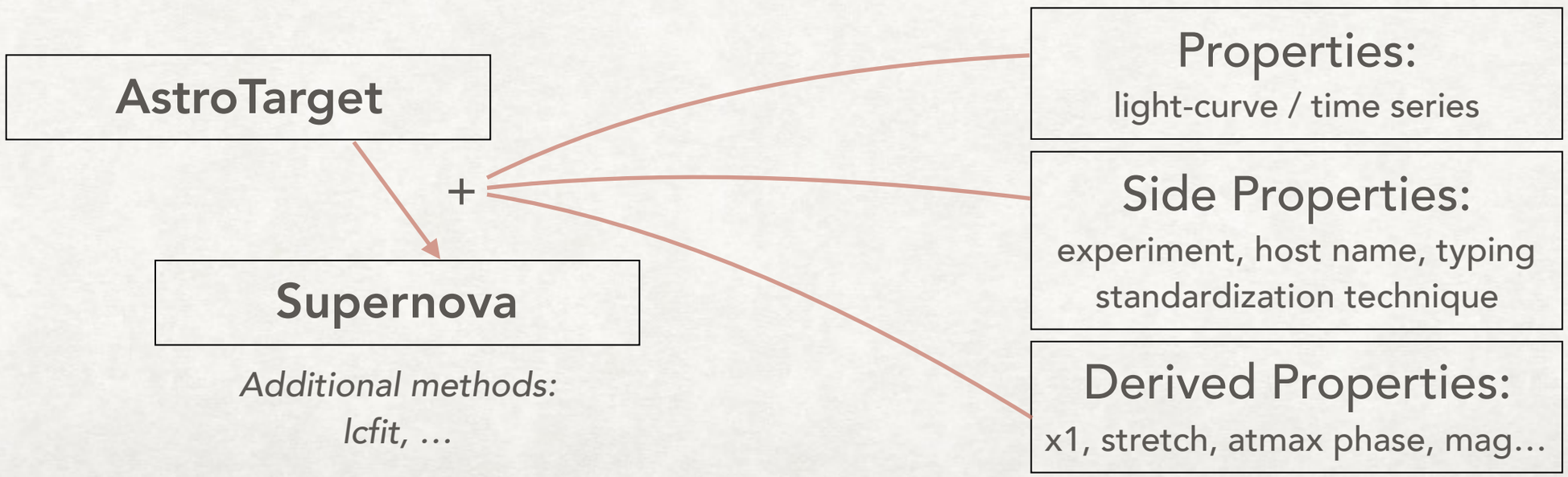
HOW — Using well thought object definition and a lot of existing tools (sncosmo / sep)

WHERE — On the git. So far in my github page for development, There is a ZTF github page made.

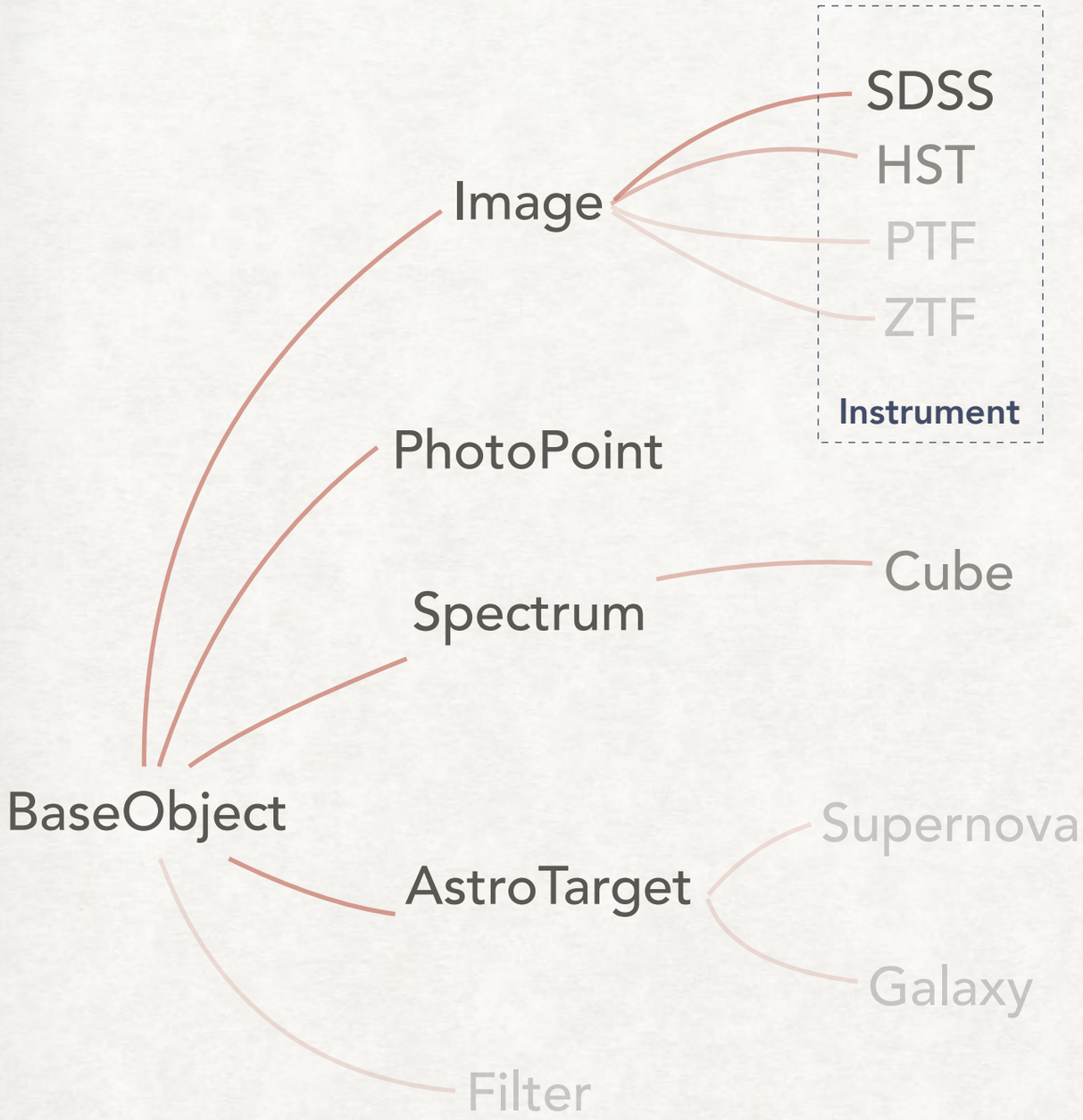
AN OBJECT EXAMPLE
THE ASTROTARGET



What is a transient ? « AstroTarget » + Time

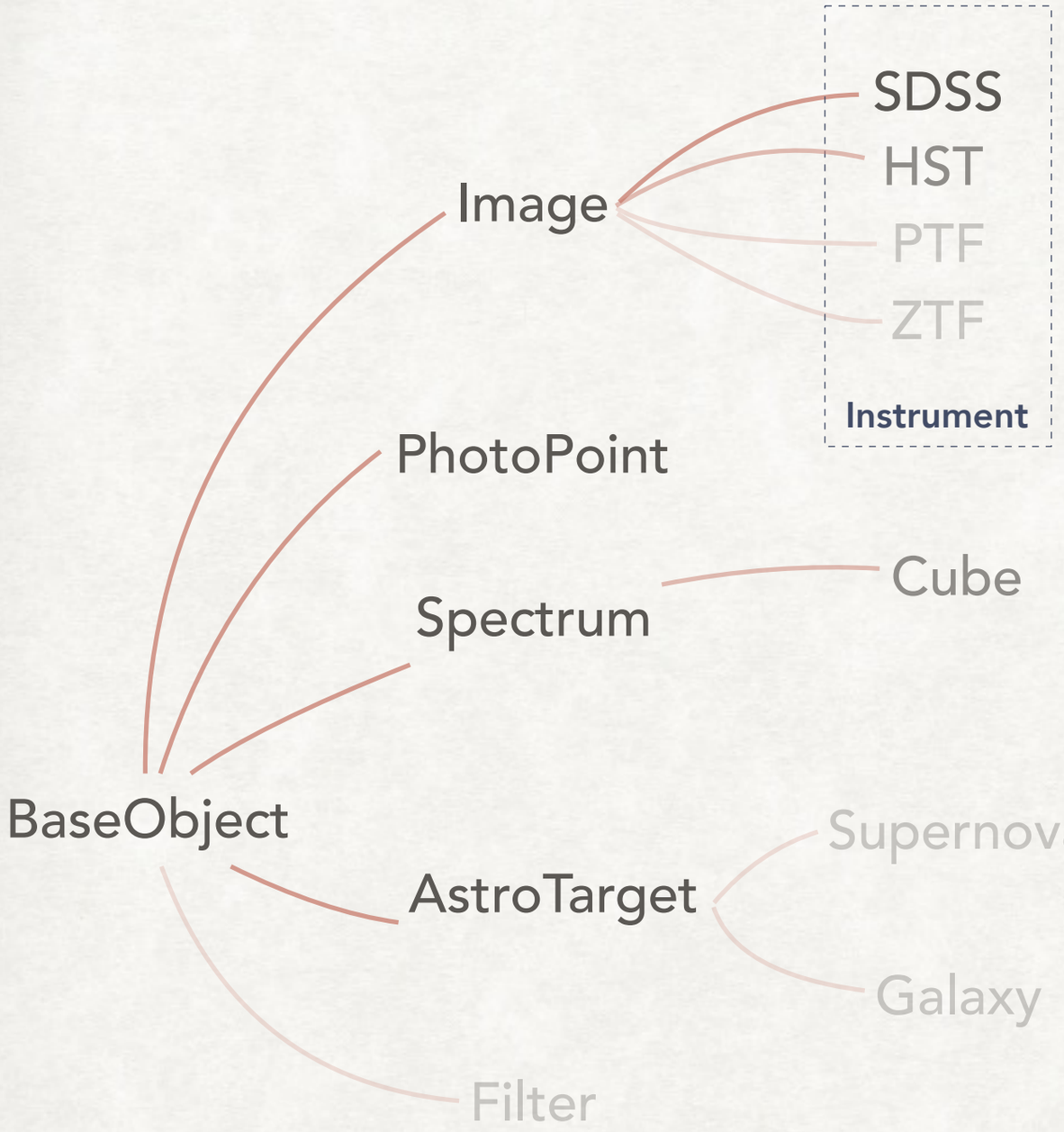


FRAMEWORK I AM WORKING ON



Simulation *For instance « SimilatedSupenova » = « Supernova » + True-values*

FRAMEWORK I AM WORKING ON



What is a lightcurve:

Several PhotoPoint + Time

What is a TimeSerie:

Several Spectrum + Time

How can I have a PhotoPoint ?

Simulation / Instrument / Spectrum

How can I have a Redshift ?

Simulation / SED-fitting / Spectrum

How can I build a SED ? (see multiband)

Several PhotoPoint + Model

How can get an Hubble Diagram ?

Bunch of SNe Ia

WHERE TO FIND MY CURRENT CODE

SO FAR MY GITHUB BUT COULD BE MOVED TO ZTF'S

https://github.com/MickaelRigault/astrobject