ATLAS proposal for updates into the CERN Open Data portal

ATLAS Datasets (1)	ATLAS Software and Learning Resources (2)	ATLAS MasterClasses (3)	ATLAS Open Data (4)	ATLAS Competitions (5)
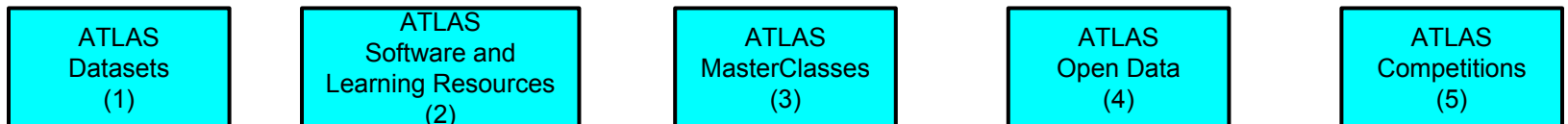
ATLAS Datasets: This section includes ATLAS data and simulated data samples.

ATLAS Software and Learning Resources: This section includes Hypatia, Minerva and ATLAS Open Data.

ATLAS Masterclasses: This section includes the LHC International MasterClasses and the WPath 2015 MasterClasses MINERVA software.

ATLAS Open Data: This section includes tools which use ATLAS open data, including software and virtual machines, as well as the data itself.

ATLAS Competitions: This section includes public competitions such as the ATLAS Higgs Challenge 2014.
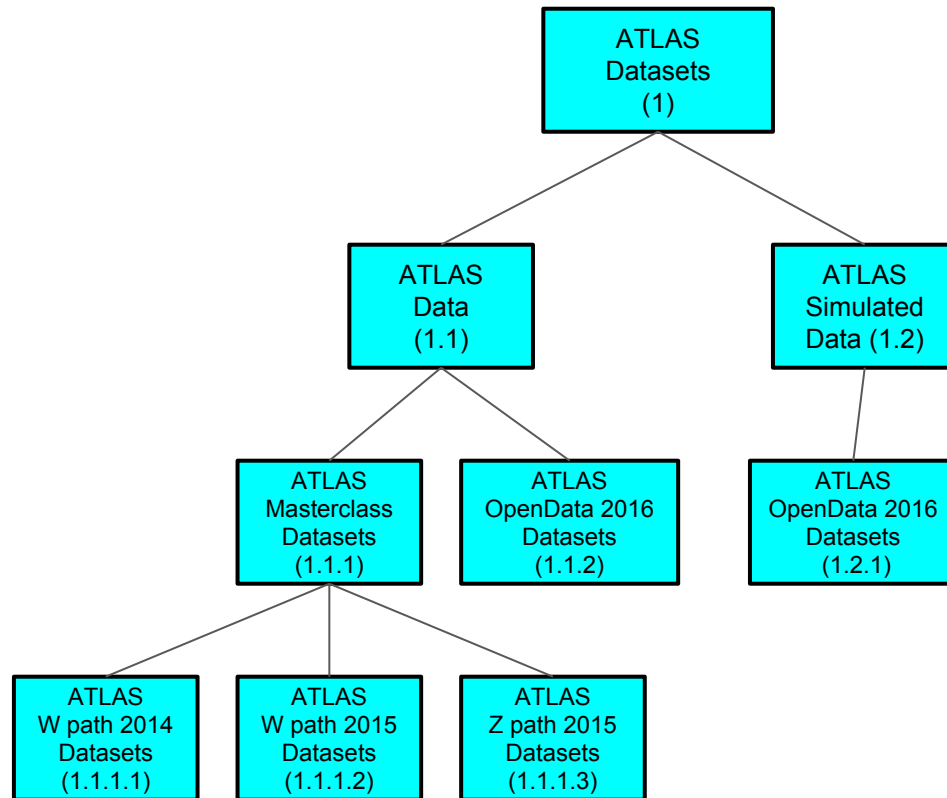
ATLAS Data: This collection contains all open ATLAS datasets.
ATLAS Simulated Data: This collection contains all open ATLAS simulated datasets.
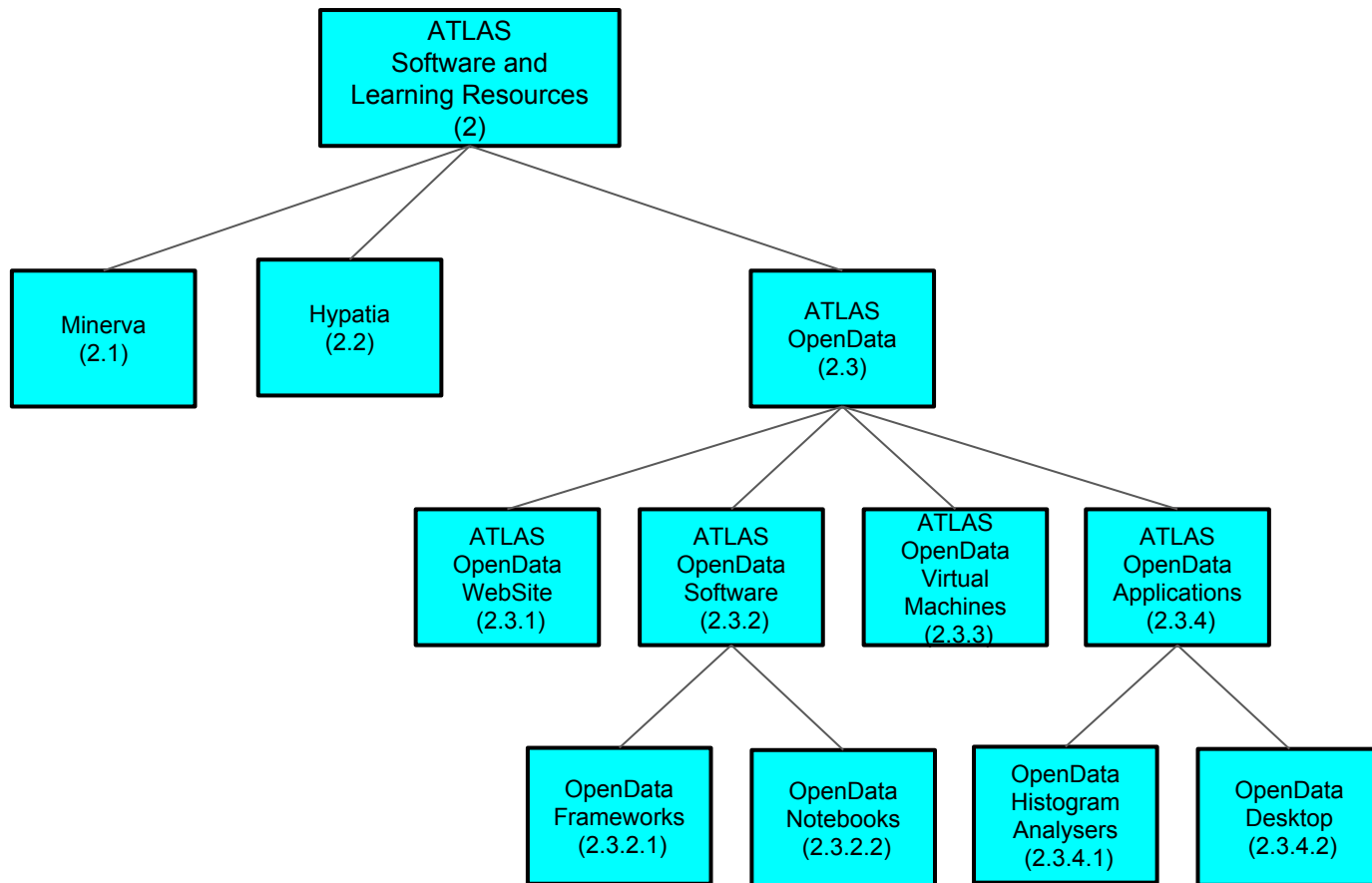
ATLAS Masterclass Datasets:
- **ATLAS W path 2014 Datasets:** This collection of data includes events recorded in 2011. To be used for WPath 2014 Masterclass.
- **ATLAS W path 2015 Datasets:** This collection of data includes events recorded in 2011. To be used for WPath 2015 Masterclass.
- **ATLAS Z path 2015 Datasets:** This collection of data includes events recorded in 2012. To be used for ZPath 2015 Masterclass.

ATLAS Open Data 2016 Datasets:
- **ATLAS Egamma Dataset Open Data 2016:** ATLAS Open Data 2016. This collection of electron and gamma events were recorded in 2012.
- **ATLAS Muon Dataset Open Data 2016:** ATLAS Open Data 2016. This collection of muon events were recorded in 2012.

ATLAS Simulated Data:
- **ATLAS Open Data 2016 Datasets:** This collection of simulated events are provided alongside the data from ATLAS Open Data 2016.

ATLAS Masterclasses:

ATLAS Data:
-   **ATLAS W path 2014 Datasets**: This collection of data includes events recorded in 2011. To be used for WPath 2014 Masterclass.
-   **ATLAS W path 2015 Datasets**: This collection of data includes events recorded in 2011. To be used for WPath 2015 Masterclass.
-   **ATLAS Z path 2015 Datasets**: This collection of data includes events recorded in 2012. To be used for ZPath 2015 Masterclass.
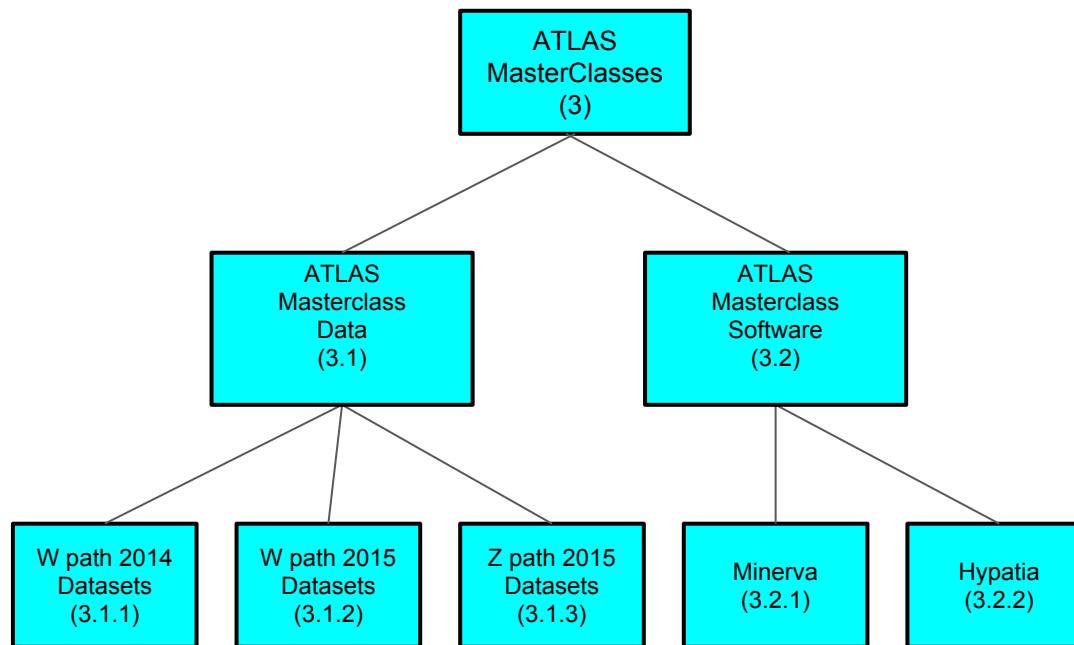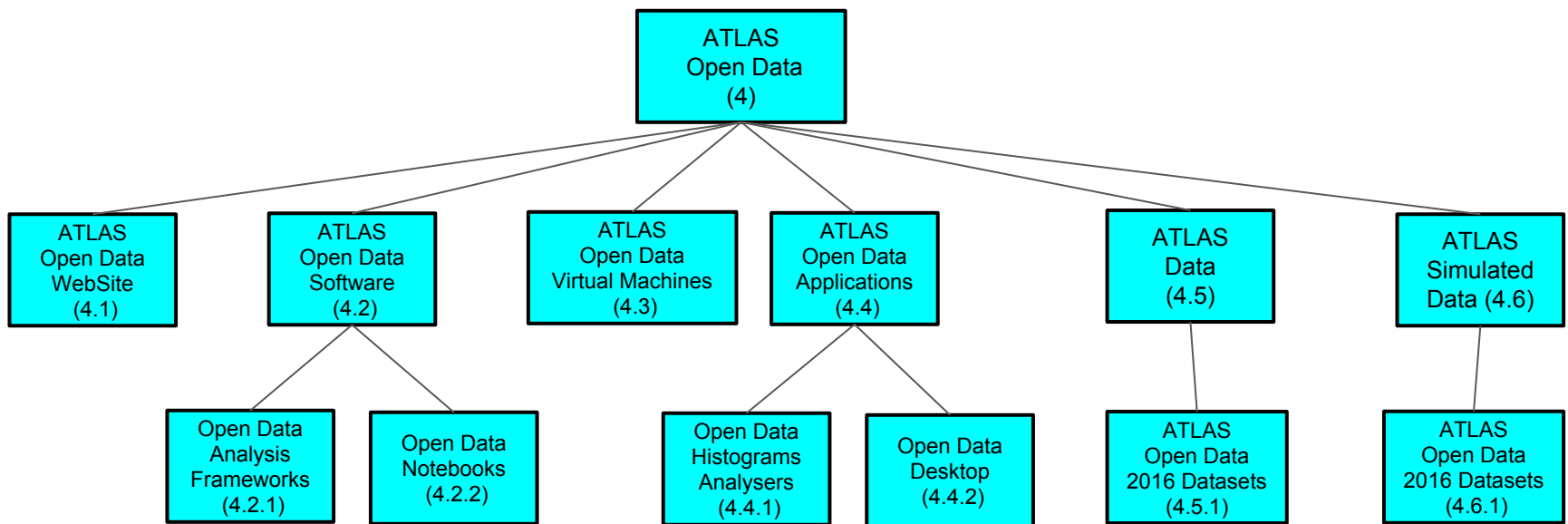
ATLAS Software:
-   **Minerva:** View event displays prepared for the W-Path Masterclasses.
-   **Hypatia:** Study the fundamental particles of matter and their interactions through the inspection of the graphic visualisation and display of the products of particle collisions.

ATLAS
Open Data
(4)

ATLAS
Open Data
WebSite
(4.1)

ATLAS
Open Data
Software
(4.2)

ATLAS
Open Data
Virtual Machines
(4.3)

ATLAS
Open Data
Applications
(4.4)

ATLAS
Data
(4.5)

ATLAS
Simulated
Data (4.6)

Open Data
Analysis
Frameworks
(4.2.1)

Open Data
Notebooks
(4.2.2)

Open Data
Histograms
Analysers
(4.4.1)

Open Data
Desktop
(4.4.2)

ATLAS
Open Data
2016 Datasets
(4.5.1)

ATLAS
Open Data
2016 Datasets
(4.6.1)

ATLAS Open Data:

ATLAS Open Data Website: link and introduction to the website, as currently exists here http://opendata.cern.ch/education/ATLAS

ATLAS Open Data Software: Learning resources for reading and analysing the Open Data 2016 datasets.

Open Data Analysis Frameworks: Analyses using ATLAS datasets written in Python and C++. Follow instructions to run the code and produce plots to look at ATLAS data. This code can also be modified to create new physics analyses.

Open Data Notebooks: Jupyter notebooks under ROOT python or C++ kernels. Jupyter notebook is an open-source web application that allows you to create and share your code. Open Data Notebooks contain example physics analyses which can be use as a starting point to create your own physics analysis using ATLAS data.

ATLAS Open Data Virtual Machines: Customised set of Virtual Machines, providing computer environments to perform data analysis
-   ATLAS Virtual Machine Version Small for (VM-S) ATLAS Open Data. For description and specifications please visit ATLAS OpenData VMs
-   ATLAS Virtual Machine Version Medium (VM-M) for ATLAS Open Data. For description and specifications please visit ATLAS OpenData VMs
-   ATLAS Virtual Machine Version Large (VM-L) for ATLAS Open Data. For description and specifications please visit ATLAS OpenData VMs
-   ATLAS Virtual Machine Version NET (VM-N) for ATLAS Open Data. For description and specifications please visit ATLAS OpenData VMs
-   ATLAS Virtual Machine Version micro (VM- µ) for ATLAS Open Data. For description and specifications please visit ATLAS OpenData VMs

ATLAS Open Data Applications: Set of software applications that can be downloaded and used offline for educational purposes
-   Open Data Histogram Analysers: A combination of JavaScript and HTML to let you visualize histograms and interact with them directly in your browser.
-   Open Data Desktop: (UNDER DEVELOPMENT) Electron-kind desktop application for Windows and Mac OS users to run all ATLAS Open Data resources.

ATLAS Data: This collection contains all ATLAS open data datasets
-   ATLAS Open Data 2016 Datasets: This collection of data includes events recorded in 2012
ATLAS Simulated Data: This collection contains all ATLAS open data simulated datasets.
-   ATLAS Open Data 2016 Datasets: This collection of simulated events are provided alongside the data from open data 2016.

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│     ATLAS       │
│  Competitions   │
│      (5)        │
└─────────────────┘
         │
         │
   ┌──────────────┐
   │    Higgs     │
   │  Challenge   │
   │    2014      │
   │    (5.1)     │
   └──────────────┘
```