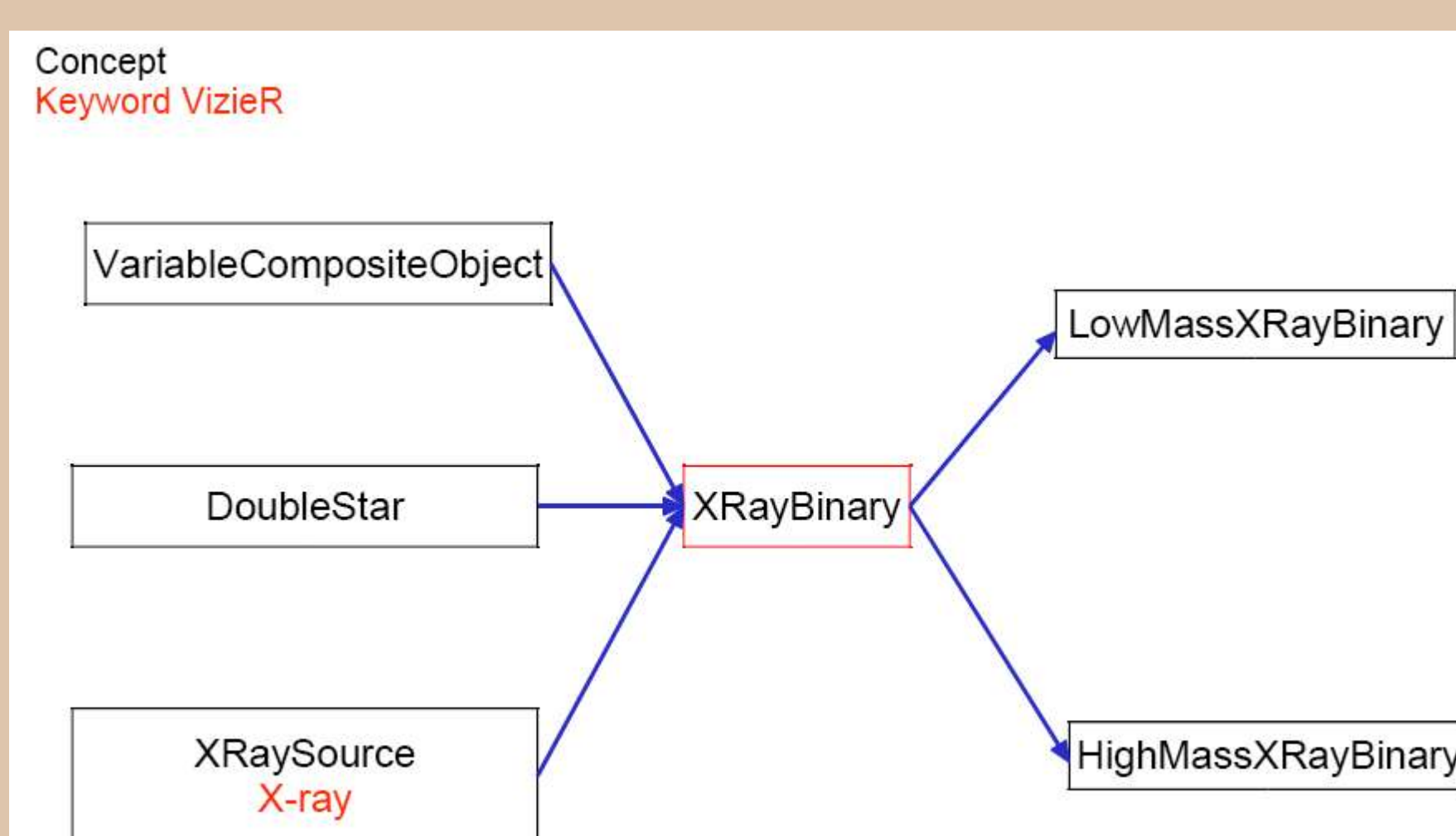
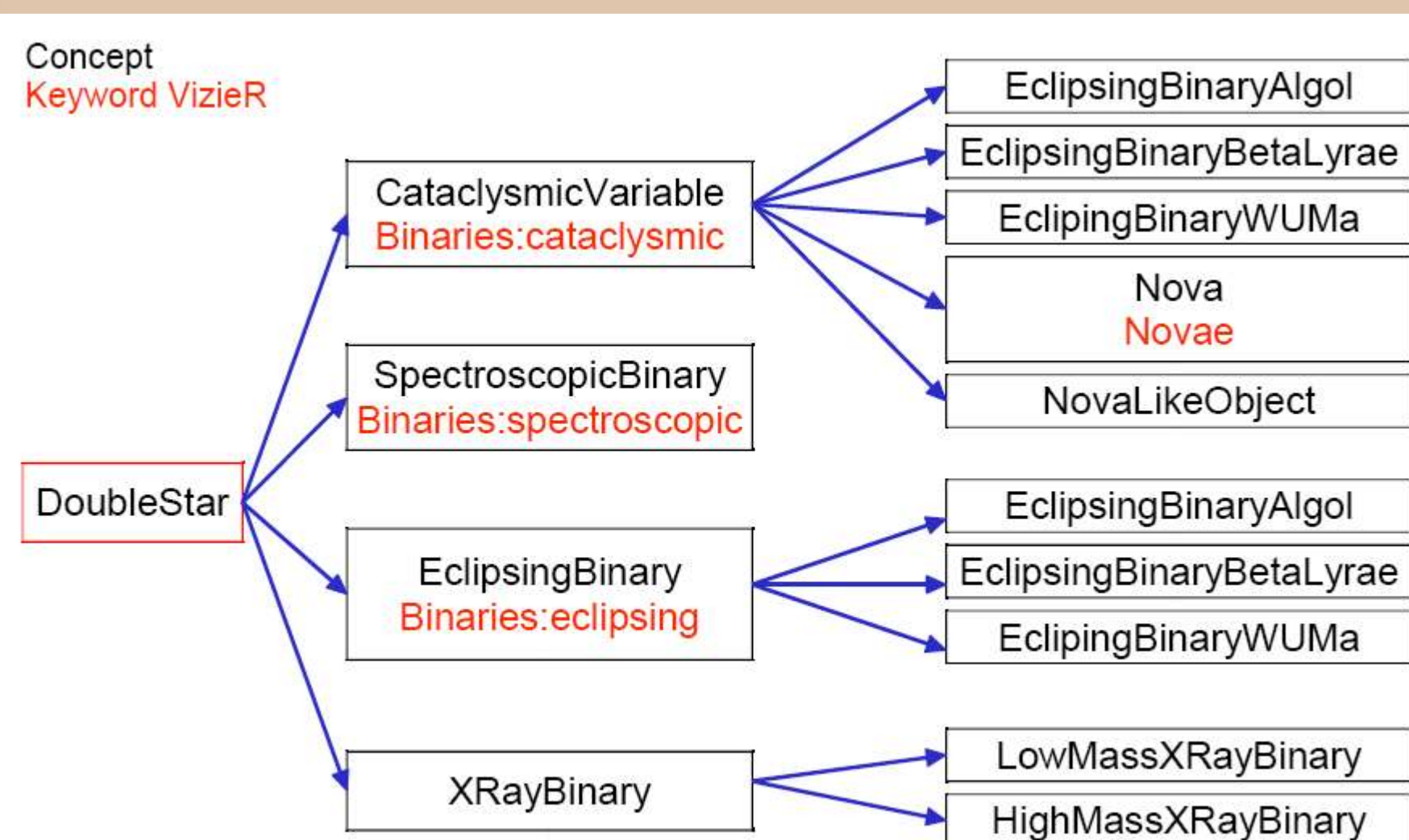


**Abstract:** We present a prototype tool to locate relevant resources in a VO registry. This tool relies on an ontology of astronomical object types that has been developed in the european VOTech project. Thanks to the ontology, a query on specific object types can be broadened or refined, and this offers a new way to locate all the matching resources..

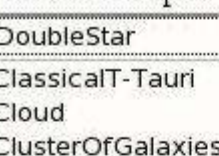
The overall structure can become quite complex (see figure on the right), but programs called reasoners, relying on description logics can perform inference on the ontology.

(Image generated with the OWLViz plugin in Protégé)

```
<content>
<subject>Binaries:cataclysmic</subject>
<description>The catalogue lists coordinates, magnitudes,
orbital parameters, stellar parameters of the components
and other characteristic properties of 168 cataclysmic
binaries, 36 low-mass X-ray binaries and 28 related
objects with known or suspected orbital periods together
with a comprehensive selection of the relevant literature
that appeared after 1986. In addition the catalogue
contains a list of references to published finding charts
for 222 of the 232 objects. A cross-reference list of
object designations concludes the catalogue.
</description>
<source>format="bibcode"&#39;1990A&#223;AS...85.1179R</source>
<referenceURL>http://vizier.u-strasbg.fr/cgi-bin/Cat?V/59/cat
</type>Catalog</type>
<contentLevel>Research</contentLevel>
</content>
```



The use of the ontology makes all implicit knowledge explicit in the query process, and allows to refine/broaden the astronomer queries. In the end, all matching VO Resources are accessible through a classical VO registry (AstroGrid in our implementation).



Select a concept :

- DoubleStar
- ClassicalAT-Tauri
- Cloud
- ClusterOfGalaxies
- ClusterOfStars
- Comet
- Compact
- CosmologicalLensing
- DQOrCataclysmicVariable
- DarkNebula
- DoubleStar
- DwarfNova
- Eclipse
- EclipseAlgol
- EclipseBetaIryae
- EclipseWUMA
- EclipsingBinary
- EclipsingBinaryAlgol
- EclipsingBinaryBetaIryae
- EclipsingBinaryWUMA

Only a max of 25 entries will be shown:

AuthorityID	ResourceKey	Actions
CDS	VizieR/J/A+A/289/871/aespe	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/289/871/yenyi	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/309/521/table1	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/312/931/aespe	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/312/931/refs	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/315/384/table3	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/319/481/table3	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/319/867/table3a	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/319/867/table3b	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>
CDS	VizieR/J/A+A/324/1173/table1	<a href="#">View</a> , <a href="#">Edit</a> , <a href="#">X</a>

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richard@astro.u-strasbg.fr

- [1] <http://simbad.u-strasbg.fr/guide/chF.htx>  
 [2] <http://ivoa.net/Documents/REC/ResMetadata/RM-20040426.html>