

## GammaLib - Action #493

Feature # 490 (Closed): Avoid casts for derived classes

### Rework GInstDir interface

09/19/2012 08:55 PM - Knödseder Jürgen

|                        |                  |                        |            |
|------------------------|------------------|------------------------|------------|
| <b>Status:</b>         | Closed           | <b>Start date:</b>     | 09/20/2012 |
| <b>Priority:</b>       | Normal           | <b>Due date:</b>       |            |
| <b>Assigned To:</b>    | Knödseder Jürgen | <b>% Done:</b>         | 100%       |
| <b>Category:</b>       |                  | <b>Estimated time:</b> | 0.00 hour  |
| <b>Target version:</b> | 00-07-00         |                        |            |
| <b>Description</b>     |                  |                        |            |

#### History

##### #1 - 09/20/2012 05:21 PM - Knödseder Jürgen

- Start date set to 09/20/2012

due to changes in a related task

##### #2 - 09/20/2012 06:49 PM - Knödseder Jürgen

- Assigned To set to Knödseder Jürgen

##### #3 - 12/18/2012 09:43 PM - Knödseder Jürgen

- Status changed from New to Closed

- % Done changed from 0 to 100

- Remaining (hours) set to 0.0

All casts in the instrument specific classes have been removed. No rework has been done on the GInstDir interface. Not clear whether we really need a rework, as long as we don't have the need for a cast.

##### #4 - 12/18/2012 10:43 PM - Knödseder Jürgen

- Estimated time set to 0.00

I did not manage to circumvent casting sad.png

Here's what I added for the moment to the GCTAInstDir class:

```
%extend GCTAInstDir {
  GCTAInstDir(GInstDir* dir) {
    GCTAInstDir* ptr = dynamic_cast<GCTAInstDir*>(dir);
    if (ptr != NULL) {
      return (ptr->clone());
    }
    else {
      throw GException::bad_type("GCTAInstDir(GInstDir*)",
        "GInstDir not of type GCTAInstDir");
    }
  }
};
```

The only advantage with respect to the former implementation is that it is nicer ...