

## GammaLib - Feature #2190

### Add GammaLib code generator

09/02/2017 05:37 PM - Knödlseeder Jürgen

<b>Status:</b>	In Progress	<b>Start date:</b>	09/02/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Knödlseeder Jürgen	<b>% Done:</b>	50%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
A code generation script should be added to automatically generate new classes, and in particular new instrument modules.			

### History

#### #1 - 09/03/2017 03:56 AM - Knödlseeder Jürgen

- % Done changed from 0 to 50

I made good progress with the code generator, and now a first script is available. It's called codegen.py and it's in dev. The script is able to create a new instrument module (or to append missing classes to an existing instrument module), including the creation of unit tests. Here is how it works:

```
$ make clean
$ dev/codegen.py
```

```
GammaLib code generator
=====
```

```
[1] Add instrument module
[2] Add spectral model
[3] Add spatial model
[4] Add temporal model
[4] Add generic class
[q] Quit
Enter your choice: 1
```

```
Add instrument module
-----
```

```
Please enter a 3 digit-name for the module: dmp
Please enter the instrument name (e.g. "Fermi/LAT"): DAMPE
Please enter your name (e.g. "Joe Public"): Joe Public's friend
All right. Have now:
Module name .....: "dmp"
Instrument name ..: "DAMPE"
Your name .....: "Joe Public's friend"
Is this correct? (y/n): y
All right. You want a new "dmp" instrument module.
Do you want event list support? (y/n): y
Do you want binned event data support? (y/n): y
```

```
[1] Add instrument module
[2] Add spectral model
[3] Add spatial model
[4] Add temporal model
[4] Add generic class
[q] Quit
Enter your choice: q
$ autoconf
$ automake
$ ./configure
$ make
$ make check
```

and you have a brand new DAMPE instrument interface compiled and tested. Following that you can start implementing.

**#2 - 09/03/2017 09:00 PM - Knödseder Jürgen**

The current version of the code generator is already merged into devel.

**#3 - 10/11/2017 09:00 PM - Knödseder Jürgen**

- *Status changed from New to In Progress*

**#4 - 01/27/2018 05:28 PM - Knödseder Jürgen**

- *Target version deleted (1.5.0)*