

# GammaLib - GModelSpectralGauss - # 1

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## GModelSpectralGauss

### Validation

The model has been validation by generating pull distributions using cspull. The validation has been done using ctools-00-07-00 and GammaLib-00-08-00 pre-release versions.

The following model has been used:

```
<?xml version="1.0" standalone="no"?>
<source_library title="source library">
  <source name="Crab" type="PointSource">
    <spectrum type="Gaussian">
      <parameter name="Normalization" scale="1e-10" value="1.0" min="1e-07" max="1000.0" free="1"/>
      <parameter name="Mean" scale="1e6" value="5.0" min="0.01" max="100.0" free="1"/>
      <parameter name="Sigma" scale="1e6" value="1.0" min="0.01" max="100.0" free="1"/>
    </spectrum>
    <spatialModel type="SkyDirFunction">
      <parameter free="0" max="360" min="-360" name="RA" scale="1" value="83.6331" />
      <parameter free="0" max="90" min="-90" name="DEC" scale="1" value="22.0145" />
    </spatialModel>
  </source>
</source_library>
```

Simulations has been done for 18000 seconds of CTA observation 0.1-10 TeV for an ROI of 5 deg. 10000 Monte Carlo samples have been drawn. Below the pull distributions, which look quite okay.

