Temporal Models

Status and ToDo

- Aim: Have working `TemporalModels` in gammapy, similar to `SpatailModels` and `SpectralModels`

- The `SkyMaps` do not have a time-axis (non-contiguous values, currently not possible as a MapAxis) - handling is a bit different.

- `__call__` and `.integral` implemented in #2787 and #2783

- Models currently available: `ConstantTemporalModel` , `LightCurveTemplateTemporalModel` , `PhaseCurveTemplateTemporalModel`

- Add new models: ExponentialTemporalModel , GaussianTemporalModel, anything else?

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Issues to be discussed

- At present, all norms lie on the SpectralModel - ergs/cm^2/s
  - If time integrated, then show it correctly
  - Should TemporalModel.integrate() return a unit?
  - [Issue connected with EnergyDependentSpatialModels as well]
- Normalisation of the lightcurve
  - Relative to the peak - What if the peak is not sampled
    - Peak outside the observation window - extrapolate?
    - Peak within window, but not sampled - interpolate
  - Integrated to 1
- Correction to the exposure map?
  - ExposureMap computed at MapDataset level
  - Correct the exposure during the model evaluation?
- Add tutorials + validation
- Add plot() - in TemporalModel or gammapy.visualisation ?
- What to do with PhaseCurveTemplateTemporalModel