H.E.S.S. and its MWL programme

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on behalf of the H.E.S.S. collaboration

H.E.S.S. and its capabilities

- Largest array in Gamma-Ray astronomy (4 times 12 m)
- Southern location (latitude -23 deg)
- Full operations since January 2004
- 12 accepted/published papers on 20 sources
- stereoscopic airshower technique (phototubes)
- threshold: 100 GeV (airmass 1.0, before cuts)

H.E.S.S. operations

Sources south of 40 deg possible, 0 deg in general;
Data-taking during dark time only (2 weeks/month);
Individual sources can be followed over 6 months.
Optimum visibility for anti-solar targets.
Bright sources with high temporal resolution.

Observing program decided by collaboration
on annual- and monthly basis (and TOOs)
through physics working groups.

MWL working group coordinates observations of H.E.S.S. with other bands/groups/instruments.

H.E.S.S. Multifrequency Program

The HESS collaboration has a dedicated multifrequency programme:
http://www.lsw.uni-heidelberg.de/projects/hess/HESS/hessmultnu.phtml

The tasks of this working group are:
* Simultaneous MWL observations for variable targets
(INTEGRAL, XMM, XTE, Chandra, optical tel., Spitzer, mm- , & radio-tel.)

* Coordinate TeV observations with other TeV obs.
* Intercalibrations with GeV experiments
* Coordinate broad-band follow-up studies of TeV sources

H.E.S.S. and AGILE

Closest matching partner in energy.
2/3rd of the whole sky accessible to both.

Common science goals:

Deep studies of "new" sources in each others' band
Simultaneous observations of variable targets.

AGILE has a larger fov (many sources at any time)
AGILE has fewer limitations in scheduling
HESS is sensitive to very short time-scales.

Technical Goals:

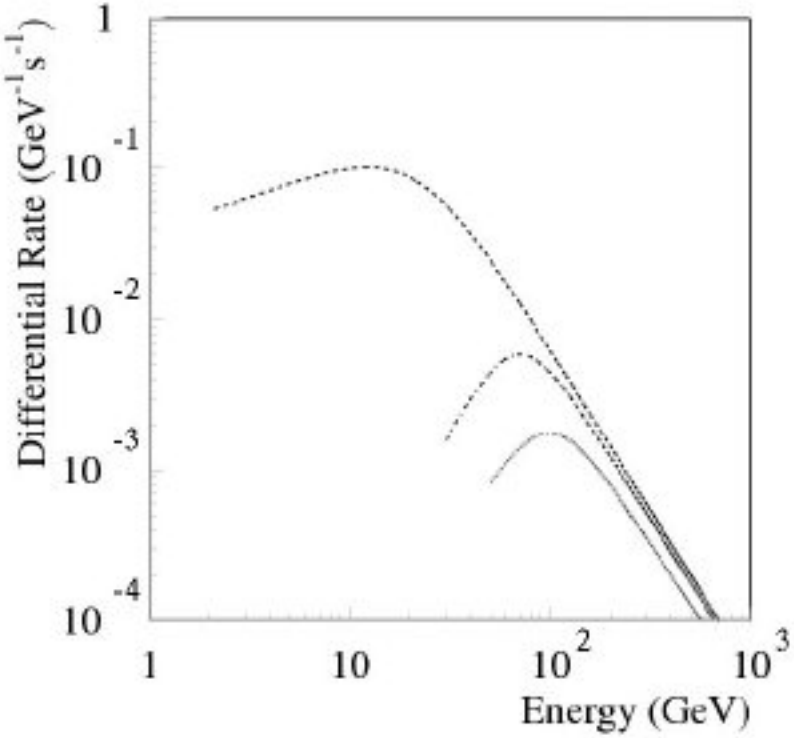
Intercalibration of flux and energy scales.

H.E.S.S. II

Phase I completed between July 2002 and December 2003
(1, 2, 3, 4 identical telescopes & cameras)

Phase II proposed, accepted, and partially funded:
Incorporating a 600 sq. meter dish into array.
Joint and independent operations with phase I

H.E.S.S. II



Goals:

Improved angular resolution and bckg. rejection (sensitivity)

Reduced threshold: 20 GeV

Time-scale: 2008+

HESS II and AGILE: partial overlap in energy and time