

Glossary of Fermi (and related) jargon

Purpose

This page aims to pull together definitions for the jargon and technical terms that get used by the Fermi collaboration. A glossary exists in the SLAC [Workbook](#), but as far as we can tell it hasn't been updated in a while. A short glossary also exists in the FSSC [Cicerone](#).

The purpose of this glossary in particular is to provide new Fermi members (especially junior members) with a resource to tackle all the jargon that gets tossed around. Therefore, **please avoid using more jargon to explain jargon**. The definitions should stand alone as much as possible, and can link to papers / Confluence pages / etc. for more detailed information. The explanations should only provide what is necessary for a basic understanding; details can go in the links.

This glossary focuses on terms that are difficult to just google ("GlastRelease", "theta"). It also includes googleable terms that have specific applications to Fermi (e.g., AGN observations in gamma rays rather than AGN in general).

Note that while this particular page is in the LAT Science Public area of Confluence and is accessible to everyone, many of the links will probably lead to internal (collaboration-only) pages.

0-9

term	definition	links
#FGL	A catalog of LAT sources, which are objects in the sky that are known to emit gamma rays over periods of time. These are often active galaxies, supernova remnants, pulsars, and pulsar wind nebulae. So far, the LAT team has published the 1FGL (which used 11 months of LAT data) and 2FGL (2 years of LAT data). There is also a 0FGL (3 months of LAT data), also known as the Bright LAT source list. The Catalog group is currently working on 3FGL. (see also <i>Catalog</i>)	0FGL page 1FGL catalog (with paper link) 2FGL catalog (with paper link) 3FGL paper
1FHL	A catalog of LAT sources (objects in the sky that are known to emit gamma rays over periods of time) that are only detected above 10 GeV. (In contrast, most standard LAT analysis begins at 100 MeV.) The 1FHL used 3 years of LAT data. (see also <i>Catalog</i>)	1FHL Confluence page
#LAC	Catalogs of LAT detections of active galactic nuclei (AGN).	1LAC Confluence page 2LAC Confluence page
#PC	Catalogs of LAT pulsar detections. 1PC reports on 46 pulsed detections using the first 6 months of data taken by the LAT. 2PC reports on 117 pulsed detections using 3 years of data taken by the LAT.	1PC Confluence page 2PC Confluence page

A

term	definition	links
ACD	(Anti-Coincidence Detector) The ACD is the collection of scintillating tiles that detect charged particles, and is crucial to background rejection. The ACD covers the tracker (the part of the LAT that converts gamma rays into electron-positron pairs and then tracks these pairs' trajectories). Charged particles will also register as signals in the tracker, so the ACD is used to determine if a signal is actually a charged particle and not a gamma ray. If an ACD tile has a "hit" (detects a charged particle) that lines up with a signal, then that fact is used to "veto" the signal (i.e., declare that it's not a gamma ray).	§2.2.3 LAT Instrument Paper
Acceptance	Defined as the effective area integrated over the solid angle subtended by the field of view (units: m ² sr). It is a measure of the "effective volume" of the entire field of view.	LAT performance page
AGN (group)	(Active Galactic Nuclei) AGNs form the largest single source class seen by the <i>Fermi</i> Large Area Telescope (LAT). Generically, AGNs are galaxies with a very bright core. Although AGNs come in many flavors - quasars, Seyfert galaxies, radio galaxies, etc. - they are all thought to be powered by supermassive black holes in their centers. The ones the LAT sees are almost exclusively bright in the radio (radio-loud) and have jets of high-velocity material shooting away from their centers. Most LAT AGNs are blazars, in which the jet is pointed close to our line of sight to the AGN. A small number are misaligned galaxies, with the jet pointed in some other direction.	AGN group page

ARR	(Autonomous Repoint Request) When the Gamma-ray Burst Monitor (GBM, the secondary instrument on <i>Fermi</i>) detects a gamma-ray burst (GRB) that is especially bright or high-fluence (i.e., emitting many photons over a period of time), it sends a message to the spacecraft to maneuver itself so that the GRB is close to the center of the LAT field of view for 2.5 hours (previously, 5 hours). This allows the LAT to get good observations of the GRB for a longer period of time than it would otherwise be able to obtain.	more info
ASP	(Automated Science Processing) A set of automated science analyses runs on the data when it comes to the ground, to detect sources that are changing rapidly in time. These are often gamma-ray bursts (GRB), which are exploding transient phenomena, or active galactic nuclei (AGN), which can sometimes flare and emit more gamma rays than they normally do for short periods of time.	ASP Data viewer
ATel	(Astronomer's Telegram) Multiwavelength, web-based short-notice publication system for reporting and commenting on new astronomical observations.	ATel page ATel ArXiv paper
ATS	(Absolute Time Sequence) A series of spacecraft and/or instrument commands that are loaded on the Fermi spacecraft.	

B

term	definition	links
BA	(burst advocate) BAs are LAT team members who keep an eye on gamma-ray burst (GRB) activity. The GRB group has automatic software to check if the LAT detected statistically significant emission from GRBs. The BA's job is to check the output from the software and alert the rest of the group. BAs are on duty for a week at a time.	BA Confluence page
back	The back half of the LAT is the 4 layers of thicker tungsten (which converts the photons into electron-positron pairs) that are at the bottom of the LAT. Photons that convert in this region tend to not be as well reconstructed as photons that convert in the front. It is possible to only use the front or back events on their own in an analyses, but generally, the fact that events are either front- or back-converting is automatically accounted for in the analysis software and instrument response functions.	Cicerone
back-converting	Back-converting events are photons that are converted into electron-positron pairs in the bottom portion of the LAT (see <i>back</i>).	
backsplash	In the LAT, upward-moving secondary particles and photons resulting from high-energy particles or photons interacting in the instrument (primarily in the calorimeter). Backsplash secondaries can trigger the ACD, causing self-veto of LAT triggers.	Cicerone
batch / batch farm	SLACs workload management platform, and job scheduler. Uses the LSF (load sharing facility) product. Allows queuing and scheduling of batch jobs on the non-interactive slac computers. Basically, the batch farm is useful if you have code that takes a while to run / needs to run on a lot of data.	LSF at SLAC presentation from 2012 Info on using the farm
BGO	(bismuth germanate detector) The Gamma-ray Burst Monitor (GBM), the second instrument on <i>Fermi</i>, is made of 2 BGO detectors (and 12 NaI ones). The BGOs detect photons between 200 keV and 40 MeV. They are positioned on opposite sides of the satellite.	
blazar	A sub-class of Active Galactic Nuclei (AGN) in which a jet of particles and photons is directed nearly along the line of sight to the Earth. Flat Spectrum Radio Quasars (FSRQs) and BL Lacertae objects (BL Lacs) are blazars, the principal type of AGN seen by the LAT.	
BL Lac	BL Lacertae objects are one of the two types of Active Galactic Nuclei in the blazar sub-class, the other being Flat Spectrum Radio Quasars (FSRQs).	
BLR	(Broad Line Region) In an Active Galactic Nucleus, a region within about a parsec of the core containing gas clouds whose rapid motions produce broadened spectral lines in the optical, hence the name.	
boresight	The boresight is the line of sight pointing out from the center of the LAT that is perpendicular to the surface of the LAT. (Essentially, it's "straight up" from the center of the LAT.)	

C

term	definition	links
C&A (group)	(Calibration and Analysis)	C&A group page

CAL	(Calorimeter) The calorimeter is the part of the LAT that is used to measure the energy of incident gamma rays. It measures the energy deposited by the electromagnetic shower that develops from the gamma ray after pair production. The main purpose of the calorimeter is to record the energy, but the CAL is also able to roughly track the trajectories. Physically, it is located at the bottom of the LAT. It is made of cesium iodide (CsI) crystals.	§2.2.2 LAT Instrument Paper
cat. / Cat.	(category) Papers involving the LAT Collaboration are assigned a category - I, II, and III.	category explanation
catalog	A catalog is a paper that contains information on all of a certain type of object that the LAT has observed. Catalogs can be more general ("all objects in the sky that emit gamma rays") or more specific ("all pulsars").	LAT catalogs
Catalog (group)		Catalog group page
clean (event class)		
CR	(cosmic ray) Cosmic rays are charged, high-energy particles from outer space. Mostly are protons, some are electrons and heavier elements. They range from a few MeV to EeV. Cosmic rays are the main source of background that the LAT detects.	
CTB	(Classification Tree Bill)	

D

term	definition	link
dec	(declination)	
diffuse (group)	The vast majority of the cosmic gamma rays seen by the LAT do not come from discrete sources but rather from interactions of high-energy particles in interstellar space. This diffuse radiation forms the bulk of the bright ridge of gamma radiation along the plane of our Milky Way Galaxy. Whether there is a truly diffuse extragalactic gamma-ray background remains a mystery.	Diffuse group page
diffuse (event class)	In previous versions of the LAT data, the diffuse event class was the event class with the most stringent cuts on background. However, the "diffuse" name is no longer used.	
DM (group)	(Dark Matter) About 85 percent of the mass in the Universe does not glow in any form of light and is therefore called Dark Matter. The interest of the LAT team in DM is that many popular models of DM predict that DM particles can interact with each other to produce secondary particles and gamma radiation.	DM group link
DQM	(Data Quality Monitor) Also known as "datamon." A DQM is the LAT member whose duty it is to monitor the spacecraft's automatic plots and diagnostics to make sure all is well. If all is not well, the DQM's task is to alert the experts, who can take a closer look. DQM shifts last for one week at a time.	DQM information page
ds9	(Deep Space 9 (seriously)) ds9 is a piece of software that is used for data visualization and imaging. For instance, someone analyzing Fermi data might use ds9 to look at a counts map (a map of where the photons that Fermi observed came from).	http://ds9.si.edu/site/Home.html
DRP		
dSph	(dwarf spheroidal galaxy) dSphs are small satellite galaxies of our Milky Way Galaxy. They are thought to contain a large fraction of Dark Matter, because the light from their stars indicates that stars make up only a small fraction of their total mass.	

E

term	definition	link
Earth limb / Earth's limb	The Earth is a bright emitter of gamma rays, due to cosmic rays interacting with the atmosphere. When the Earth is in the LAT field of view, the part of the Earth that is visible is known as the Earth limb. Almost all LAT analysis needs to minimize the contribution from the Earth limb. (see <i>zenith angle cut</i>)	
EBL	(Extragalactic Background Light) When used in gamma-ray astrophysics, EBL usually means the infrared-optical-ultraviolet light that fills intergalactic space, coming from all the stars that ever existed. Gamma rays can be absorbed by the EBL through the process of photon-photon pair production, in which a high-energy gamma ray collides with a low-energy IR-optical-UV photon to produce an electron-positron particle pair.	

EDISP	(energy dispersion) The energy dispersion is a measure of how accurately we can reconstruct the energy of a photon from the energy it deposits in the LAT calorimeter. The energy dispersion is a part of the LAT Instrument Response Functions (IRFs); however information on the energy dispersion is not automatically taken into account in the <i>Science Tools</i> for standard LAT analysis.	Cicerone
effective area	The number of photons detected divided by the source flux. The LAT effective area is a function of photon energy and inclination angle.	FSSC page LAT performance page
EGB	(Extragalactic Background) After accounting for known sources of gamma rays from individual sources and diffuse radiation within our Milky Way Galaxy, there is a residual component called the EGB. Some or most of the EGB is thought to originate from unresolved sources at large distances.	
EPO (group)	(Education and Public Outreach)	EPO group link
event	An "event" is a catch-all name for "things that the LAT detects" (although sometimes it is used specifically to mean photons). In practice, these are either photons or cosmic rays.	
event class	Events that are detected by the LAT are sorted into different classes based on how confident we are that the event is a photon.	Cicerone
Evo	Video conferencing software that has now been superseded by SeeVogh. <i>see also "SeeVogh"</i>	
exposure		

F

term	definition	link
F2F	Face-to-face	
FA	(flare advocate) Flare Advocates are volunteers who watch the LAT gamma-ray sky on one-week shifts, looking for flares of known or unknown gamma-ray sources.	Flare Advocates Confluence Main Page
FITS / fits / .fits / fit (file type)	(Flexible Image Transport System) FITS files are often used in astronomy, and are made of one or more HDUs (Header and Data Unit). Each HDU has a header with general information about the file, the instrument, etc., as well as a table or image. Public LAT data is always (?) distributed as FITS files.	FITS Support Office
FltOps	(Flight Operations)	
FOT	(Flight Operations Team) The FOT is the staff at the Mission Operations Center (at NASA Goddard), which controls the spacecraft. The FOT is responsible for, among other things, inputting special maneuvers such as TOOs.	
FOV / FoV	(field of view) The FOV is the useful solid angle on the sky seen by a Fermi instrument at one time. The LAT FOV is about 2.4 steradians; the GBM FOV is about 8.5 steradians (everything in the sky not blocked by the Earth).	
front	The front half of the LAT is the 12 layers of thinner tungsten (which converts the photons into electron-positron pairs) that are at the top of the LAT. Photons that convert in this region tend to better reconstructed than photons that convert in the back (or bottom). It is possible to only use the front or back events on their own in an analyses, but generally, the fact that events are either front- or back-converting is automatically accounted for in the analysis software and instrument response functions.	
front-converting	Front-converting events are photons that are converted into electron-positron pairs in the top portion of the LAT (see <i>front</i>).	
FSRQ	(Flat Spectrum Radio Quasar) FSRQs, along with BL Lac objects, make up the sub-class of Active Galactic Nuclei called blazars, the most common type of extragalactic source seen by the LAT.	
FSSC	(Fermi Science Support Center)	Fermi Science Support Center
FSW	(Flight Software)	
FT1 (file)	FT1 files are the LAT public data files with information on each individual photon.	
FT2 (file)	FT2 files are the LAT public data files with information on the spacecraft (where it is, where it's pointing, etc.).	
FTOOLS	A package of tools to manipulate FITS files.	FTOOLS main page

FUG	(Fermi Users Group) An advisory panel of scientists from gamma-ray and related disciplines. The FUG represents all scientists who use Fermi data.	Fermi Users Group
fv	(Fits Viewer) fv is a program to view FITS files.	fv main page

G

term	definition	link
GALPROP	GALPROP is a numerical code for calculating the propagation of relativistic charged particles and the diffuse emissions produced during their propagation through the Galaxy. GALPROP is used in calculating the diffuse Galactic gamma radiation seen by the LAT.	GALPROP Home page
GBM	(Gamma-ray Burst Monitor) The GBM is the other instrument on <i>Fermi</i> . It is made of 12 NaI (sodium iodide) and 2 BGO (bismuth germanate) detectors. The GBM detects emission from gamma-ray bursts, solar flares, terrestrial gamma-ray flashes ...	
GCN	(Gamma-ray Coordinates Network) GCN is the primary way the gamma-ray-burst (GRB) community shares information. GCN Notices and Reports are sent out by essentially all GRB observers Some AGN flares from the LAT also trigger GCN Notices to inform multiwavelength observers that something interesting is happening in the gamma-ray sky.	
GEANT		
ghosts	Ghosts are events where two particles enter the LAT in a small enough time frame that the LAT considers the interactions a single event. A typical example would be a gamma ray and proton entering the LAT near simultaneously. This caused a fraction of gamma-ray events to be vetoed. This problem was first addressed in Pass7 and substantial improvements have been made in Pass8 to recover gamma-ray data from these ghost events.	
GI	(Guest Investigator)	
GLAST	(Gamma-ray Large Area Space Telescope) GLAST is the name that <i>Fermi</i> was referred to before it was launched. It is tradition to give NASA missions a different name after launch, as a good-luck superstition.	
GlastRelease		
GLEAM		
GRB (group)	(Gamma-Ray Burst) The LAT has detected high-energy emission (>100 MeV) from ~80 GRBs since launch. In some cases, it detects the prompt emission (the short "burst" of photons lasting anywhere from less than a second to hundreds of seconds), and in the majority of cases it detects the afterglow (the long lasting, slowly fading emission). The Gamma-ray Burst Monitor has detected keV-MeV emission from over 1000 GRBs.	GRB group page
gt_____	The standard set of software used to analyze LAT data is called the <i>Science Tools</i> . Each individual tool has a specific function. The names all start with "gt", for "GLAST", which was the original pre-launch name of <i>Fermi</i> .	Science Tools references

H

term	definition	link
HEASARC	(High Energy Astrophysics Science Archive Research Center)	HEASARC NASA page
HMB or HMXB	(High-mass binary/High-mass X-ray binary) HMB systems consist of a compact object (neutron star or black hole) orbiting a high-mass normal star. The LAT sees a number of HMB systems, with orbital periods ranging from 4.8 hours (Cygnus X-3) to about 5 years (Eta Carinae).	

I

term	definition	link
IEM	Interstellar Emission Model	
IGRB	Isotropic Gamma Ray Background	
IRF	(Instrument Response Function)	Cicerone
ISOC	(Instrument Science Operations Center)	

J

term	definition	link
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JIRA		
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K

L

term	definition	link
L1Proc	(Level 1 Processing)	
LAT	(Large Area Telescope) The LAT is the main instrument on <i>Fermi</i> . The parts of the LAT are the Tracker, Calorimeter, and ACD.	
light curve	A light curve is generally a plot of the photon flux versus time. For pulsars, a light curve is usually a plot of the photon flux versus the pulsar phase.	
likelihood	Maximum likelihood analysis, likelihood for short, is the principal statistical analysis tool used in LAT analysis to evaluate significance of any signal.	
livetime		
LLE	(LAT Low Energy) LLE is a loose event selection that starts at 30 MeV (while the standard LAT event classes start at 100 MeV). The LLE is background-dominated, so it is only appropriate for short, transient events such as gamma-ray bursts or solar flares.	
LMC	(Large Magellanic Cloud) The LMC is a small neighboring galaxy to our Milky Way. The same processes that produce gamma rays in our Galaxy produce a gamma-ray signal in the LMC detectable by the LAT.	
LPA	(LAT Physics Acquisition)	

M

term	definition	link
M31	M31, the Andromeda Galaxy, is the closest large spiral galaxy to our own. It is the only such galaxy to be seen as a gamma-ray source.	
MC	(Monte Carlo)	
merit / merit file		
MET	(Mission Elapsed Time) Many missions record times in MET, which is the number of seconds since January 1, 2001.	A tool for converting from MET to dates
MIP	(minimum ionizing particle)	
MOC	(Mission Operations Center)	
MSP	(millisecond pulsar) MSPs are generally considered to be "recycled" pulsars, neutron stars in binary systems, spun up by accretion from their companion star. As the name implies, MSPs have rotation periods in the millisecond range. Think kitchen blender speed, only on an object the size of the Washington Beltway having a mass 1.5 times that of our Sun.	
multimessenger	Multimessenger studies include data from instruments that detect things other than light. For instance, one might combine LAT data (photons) with neutrinos, cosmic rays, gravitational waves, etc.	
MW	(multiwavelength) Multiwavelength studies are conducted across different wavelengths and energies. For instance, one might combine LAT data (MeV-GeV) with optical, radio, IR, TeV, etc. data.	

N

term	definition	link
nadir	The nadir is the line going from <i>Fermi</i> pointing directly to the center of the Earth.	
nadir observations	When <i>Fermi</i> conducts nadir observations, it reorients itself so that it is essentially upside down. During normal operations, <i>Fermi</i> is looking at the sky, but during nadir observations it observes photons from the Earth.	
Nal	(sodium iodide) The Gamma-ray Burst Monitor (GBM), the second instrument on <i>Fermi</i> , is made of 12 Nal detectors (and 2 BGO detectors). The Nals detect photons between ~8 keV and 1 MeV. They are positioned around the spacecraft to view the entire sky at all times. The GBM team uses the amount of signal in each Nal detector to calculate localizations.	

Nova	<p>A nova is a sudden brightening in a stellar binary system, one of whose members is a white dwarf star. Matter falling onto the white dwarf from its companion accumulates until it produces a thermonuclear runaway on the star surface. Unlike a supernova, a nova does not destroy the original star.</p> <p>Fermi LAT has seen two types of novae: one from a symbiotic binary system, in which the white dwarf companion is a red giant star; and several classical novae, for which the white dwarf companion is a main-sequence star.</p>	
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O

P

term	definition	link
Pass #, version #		
Pgwave		
phi		
pipeline		
pointed observations		more info
pole pointing		
PSF	<p>(point-spread function)</p> <p>When the LAT detects a photon, what actually happens is that the components of the LAT (tracker, calorimeter, ACD) register "hits" from the charged particles that the photon converts into. The PSF is a measure of how accurately we can reconstruct a photon based on the measurements of the charged particles' trajectories. The PSF of the LAT depends on both the original photon's energy and inclination angle. This is part of the set of LAT Instrument Response Functions (IRFs), and is automatically taken into account by the <i>Science Tools</i>.</p>	Cicerone
PSR	<p>(pulsar)</p> <p>Pulsars are rapidly rotating, magnetized neutron stars. Pulsars were originally discovered by a graduate student, Jocelyn Bell, as "blinking" radio sources. The electric fields generated by the rotating magnetic field accelerates particles to high energies, and these particles interact to produce radiation across the electromagnetic spectrum, including gamma rays.</p>	Pulsar group page
PWN	(pulsar wind nebula)	

Q

R

term	definition	link
RA	(right ascension)	
ROI	<p>(region of interest)</p> <p>The ROI is the region of space that is being analyzed. A typical ROI for an individual source (such as a pulsar or a gamma-ray burst) is 10 or 12 degrees, although the exact size can differ and depends on the many factors.</p>	
ROOT, .root file	<p>ROOT is an object oriented software package built on C++ by particle physicists at CERN to analyze large amounts of data. The Merit files are root files and require ROOT to read the data from said file.</p>	http://root.cern.ch/drupal/

S

term	definition	link
SAA	<p>(South Atlantic Anomaly)</p> <p>The SAA is a region of the sky over the southern part of the Atlantic ocean that contains a lot of charged particle activity. Both the LAT and the GBM detect charged particles as part of the background, so when the spacecraft enters the SAA, the detectors are turned off (data is not stored). The LAT and GBM have slightly different definitions of the borders of the SAA.</p>	
safe hold		
Science Tools		
SeeVogh	SeeVogh is the video conferencing software that is used by the LAT collaboration.	SeeVogh Research Network
selection		

Senior Review	NASA has a policy that every operating mission must be reviewed for scientific productivity every two years. These Senior Reviews are conducted by senior scientists, hence the name. Missions that fare poorly in a Senior Review are terminated. The Fermi Project has to write a Senior Review Proposal each time to explain what Fermi has accomplished and what it will do in the coming years. The Project Scientist and the head of the Fermi Users Group (FUG) do a presentation to the Senior Review Panel.	
SMC	(Small Magellanic Cloud) The SMC is a small neighboring galaxy to our Milky Way. The same processes that produce gamma rays in our Galaxy produce a gamma-ray signal in the SMC detectable by the LAT.	
SNR	(supernova remnant)	SNR group page
source (event class)		
survey mode		
star trackers		
starburst galaxies	Starburst galaxies are ones undergoing much more rapid star formation than normal galaxies like our own. This star formation results in a high supernova rate, enhancing the cosmic-ray densities and hence gamma-ray production in these galaxies. Despite being more distant than some normal galaxies, some of these are visible as gamma-ray sources while closer normal galaxies are not.	

T

term	definition	link
TDRSS	(Tracking and Data Relay Satellite System) TDRSS is an array of satellites in geosynchronous orbit. These satellites relay data from missions like Fermi to ground stations.	
TEM	(Tower Electronics Module)	
TGFs	(terrestrial gamma-ray flashes) TGFs are very short (less than 1 millisecond) flashes of low-energy gamma rays produced near thunderstorms on Earth. The large electric fields of thunderstorms accelerate electrons to high enough energies that they can produce gamma rays as they interact with air molecules.	
theta		
ToO	(Target of Opportunity)	more info
transient		
transient (event class)		
TKR	(Tracker) The Tracker is a part of the LAT whose purpose is twofold: 1) To convert gamma rays into electron-positron pairs, and 2) To track these pairs of charged particles through the instrument in order to figure out where the original gamma ray came from. The Tracker is made of alternating layers of tungsten foils (to convert the gamma rays) and silicon strip detectors (to track the pairs).	§2.2.1 LAT Instrument Paper
Trunc64		
TS	(test statistic)	

U

term	definition	link
ultraclean (event class)		

V

W

term	definition	link
walkthrough	Part of the internal review process for any LAT publication is that the material is presented at a Weekly Analysis Meeting by having the authors walk the team through the paper.	
WAM	(Weekly Analysis Meeting) An online collaboration-wide meeting held every Friday at 8 am PST / 11 am EST / 5 pm CST. The WAMs are held over SeeVogh, which can be downloaded at this website . Topics discussed during WAMs include collaboration-wide items of interest (such as newly released Fermi data), detections of GRBs (gamma-ray bursts) and flaring AGN (active galactic nuclei), and walkthroughs (short summaries) of upcoming papers within the LAT collaboration.	WAM agenda page
white paper		

X

Y

Z

term	definition	link
zenith	The point on the sky that is opposite to the Earth for the <i>Fermi</i> spacecraft.	blocked URL (diagram from Wikipedia) (imagine the person is <i>Fermi</i>)
zenith angle cut	The zenith angle cut defines the maximum zenith angle for all the photons that will be used in an analysis. The zenith angle cut is used to cut down on the emission from the Earth limb (the part of the Earth that is in the LAT field of view).	

AG component