

## I. "top level" - general division:

## A. AGN AS A POPULATION AND THE BLAZAR PHENOMENON

This would involve issues such as the statistical properties of gamma-ray emitting AGN and the relationship to other kinds of AGN:
LogN-logS, definition of gamma-ray emitting blazars as a sample, contribution of unresolved radio-loud blazars to the gamma-ray background, and evolution of jet-dominated vs. jet-less sources: of the subjects that we had before would fit here, is Science Goal (1).

## B. AGN AS A TOOL

Here, we would include all of the EBL - type investigations, and also other possible studies involving cosmology.

C. PHYSICS OF GAMMA-RAY EMITTING AGN (includes mainly blazars and radio galaxies)
This is about how gamma-ray emitting AGN works, including the jet
structure, content, and radiative processes,
This was the bulk of the science goals as listed in our Web site.



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II. "One level down" - with this, each "top level" can be broken down further, and even
        further. For the "top level C" we envision:
C.1 WHAT is the structure (ingredients/content) of the jet in blazars and radio galaxies?
     C.1.(a) the content of innermost part of the jet
         (e<sup>+-</sup>, baryon load, Poynting flux)
            --> covers original goal (5)
     C.1.(b) composition of gamma ray emitting part of jet
         (e<sup>+-</sup>, pe<sup>-</sup>/UHECRs, magnetic field)
           --> covers original goal (2,6,8,11)
C.2 HOW are the X-/gamma-ray flares produced in blazars and radio galaxies?
      C.2.(a) importance of external photon fields (BLR, accretion disk,
          torus, CMB, ...) for X- & gamma-ray production
             --> covers original goal (3,9)
      C.2.(b) relation between flares to dissipation of magnetic energy
           --> covers original goal (7)
C.3 WHERE are the X-rays/gamma-rays produced ?
      C.3.(a) photon production sites of low & high energy (HE) component
            --> covers original goal (4)
      C.3.(b) energization sites
            --> covers original goal (10)
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