

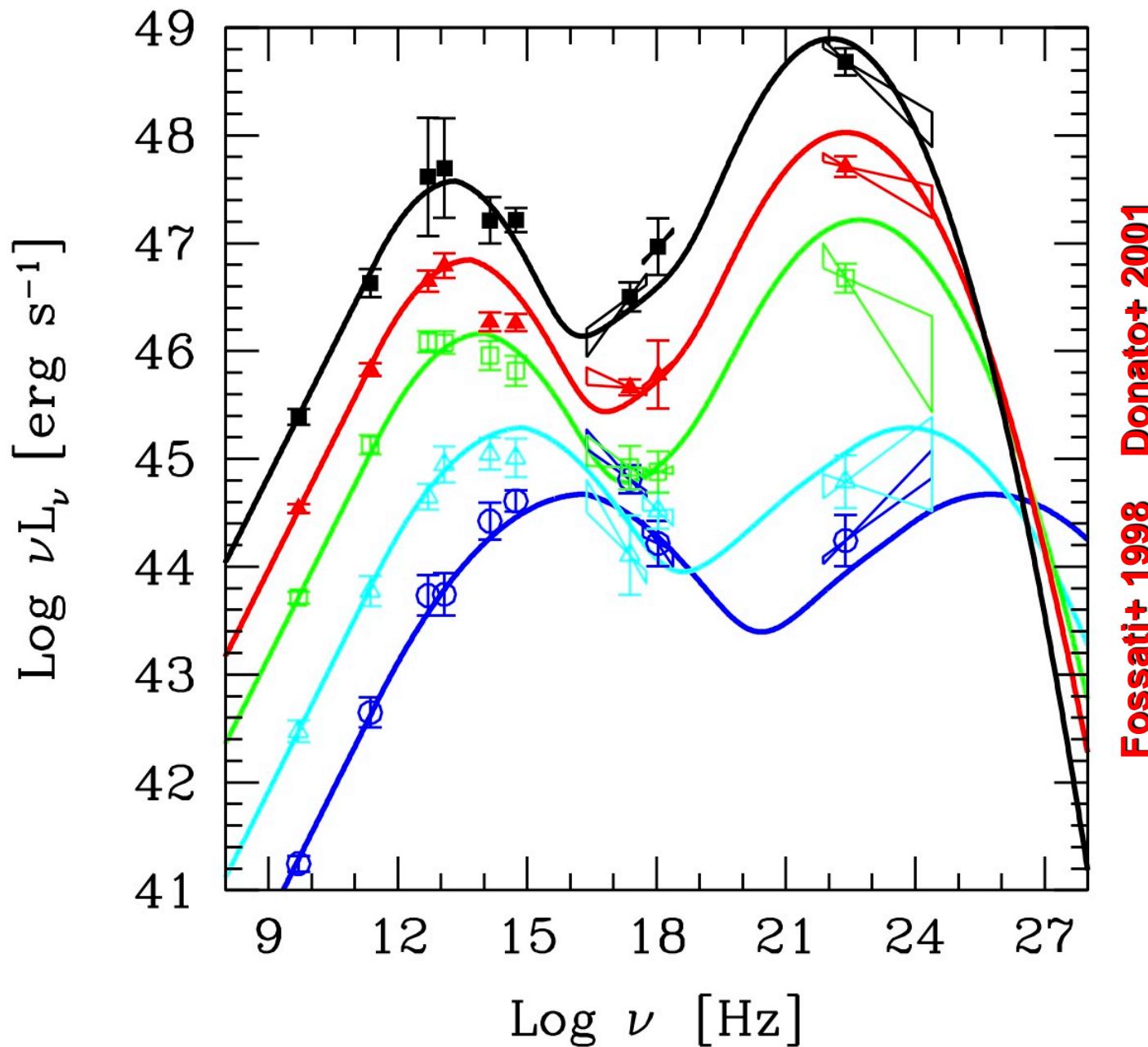
Jets and accretion in blazars

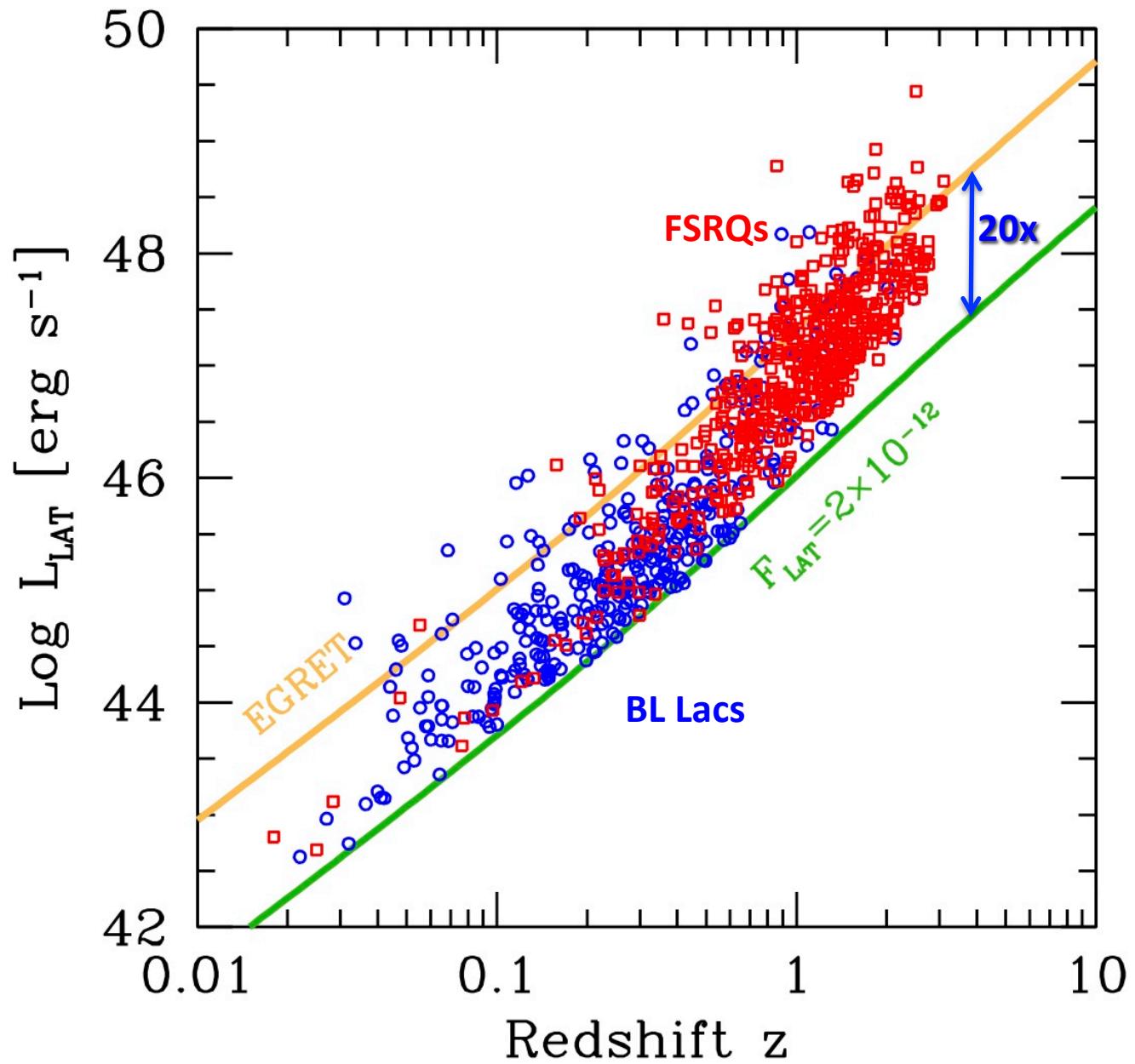
*Gabriele Ghisellini
INAF - Osservatorio di Brera*

The blazar sequence 2.0

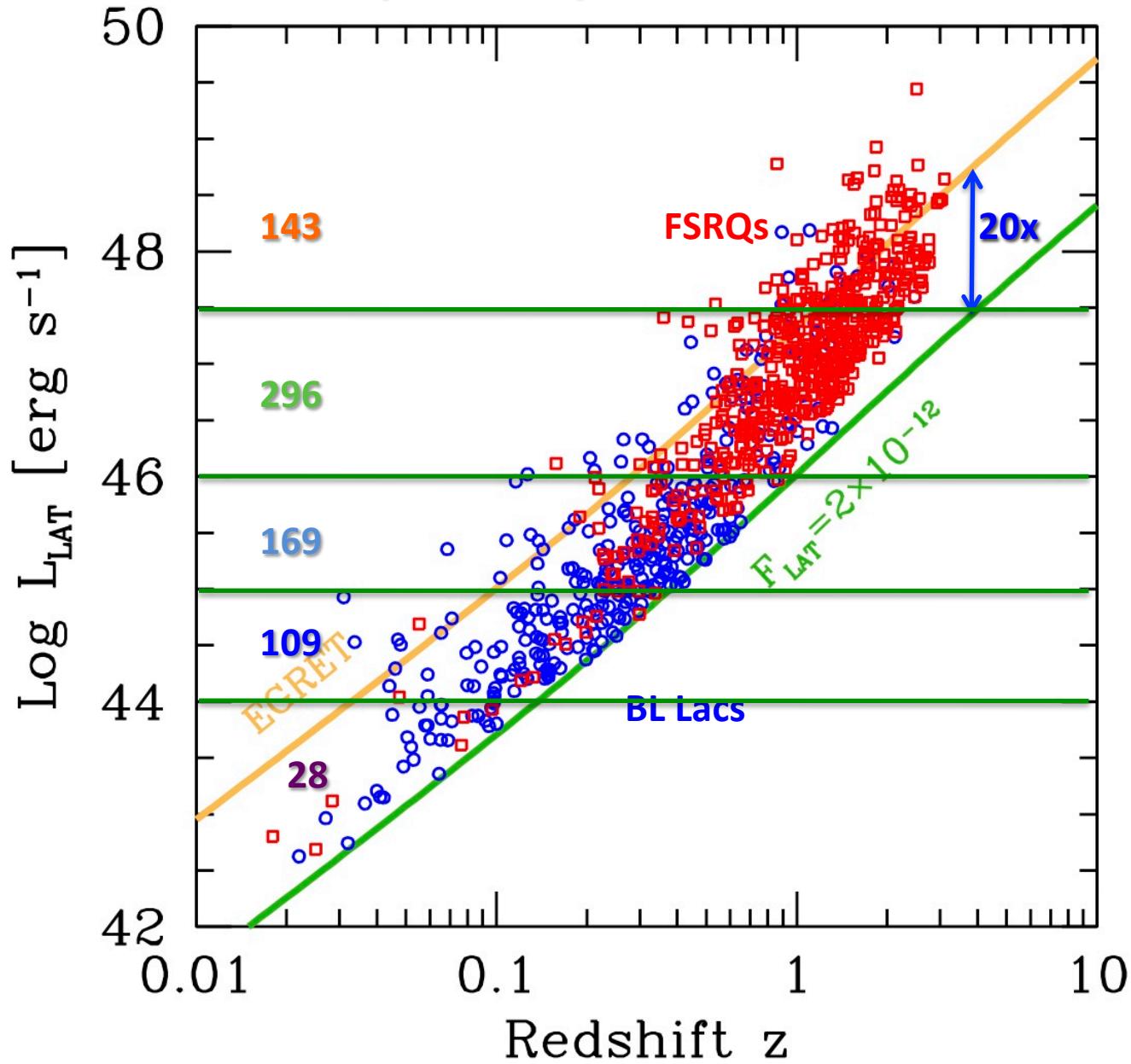
*Gabriele Ghisellini
INAF - Osservatorio di Brera*

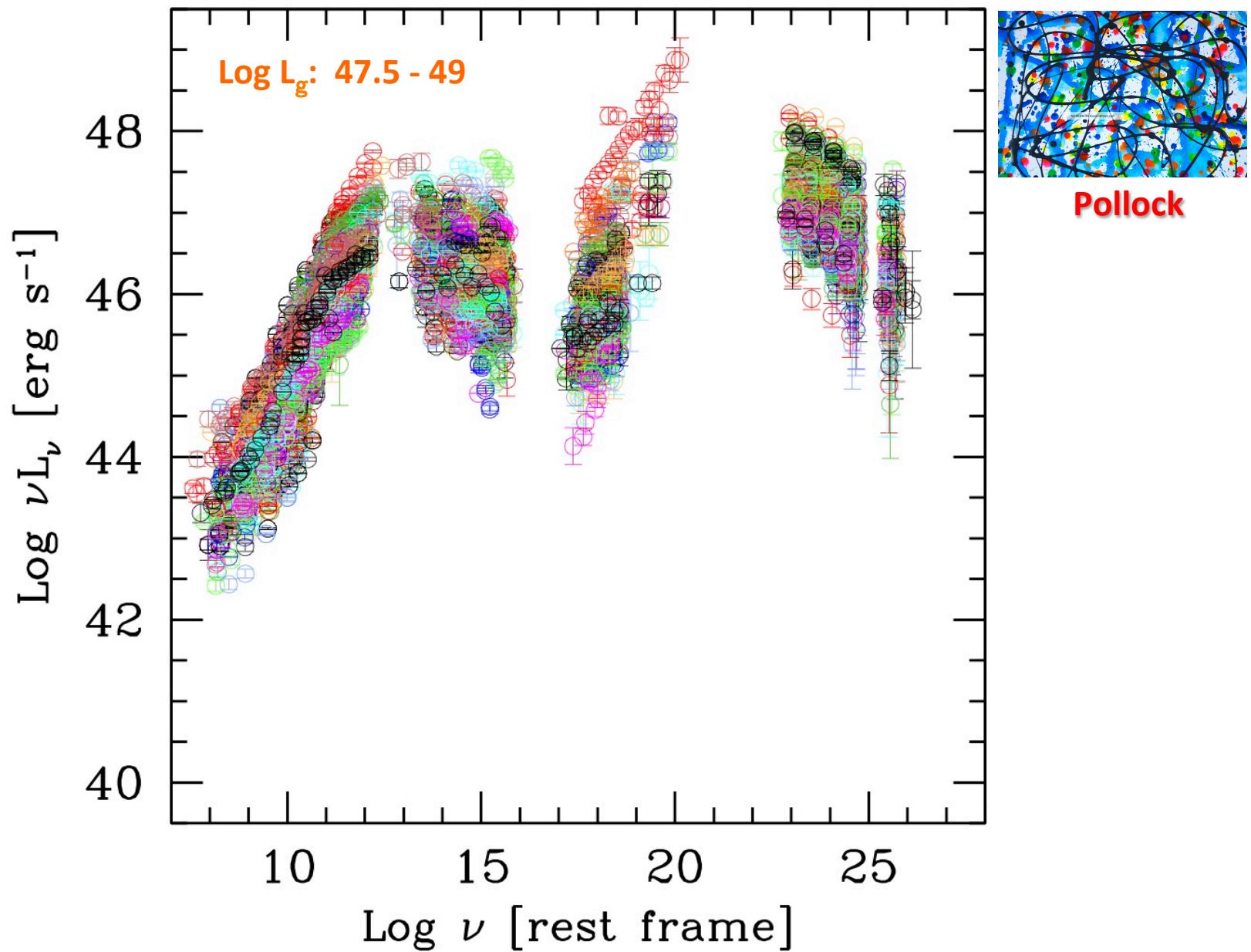
The blazar sequence 1.0: 126 blazars, only 33 detected in g

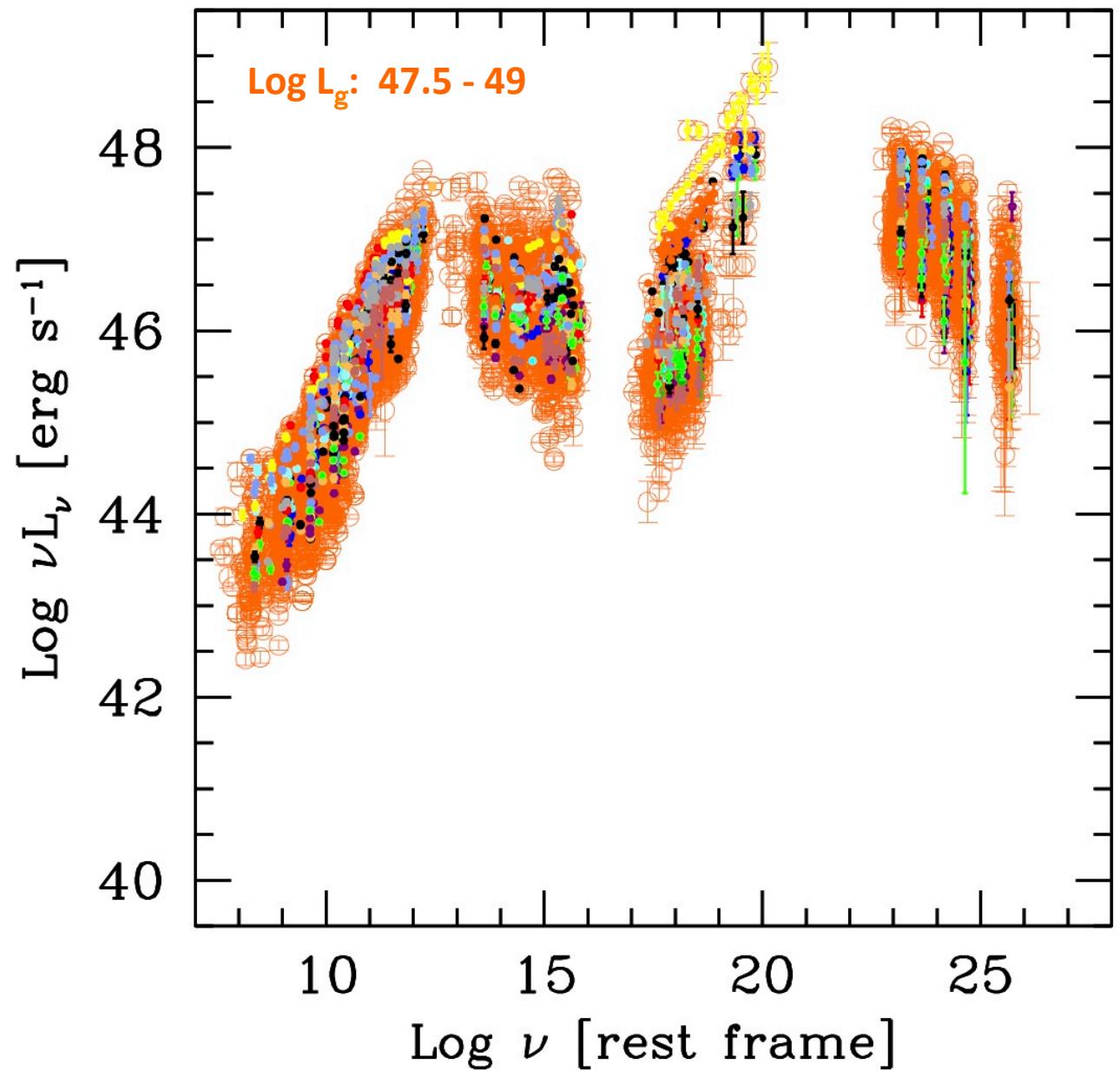


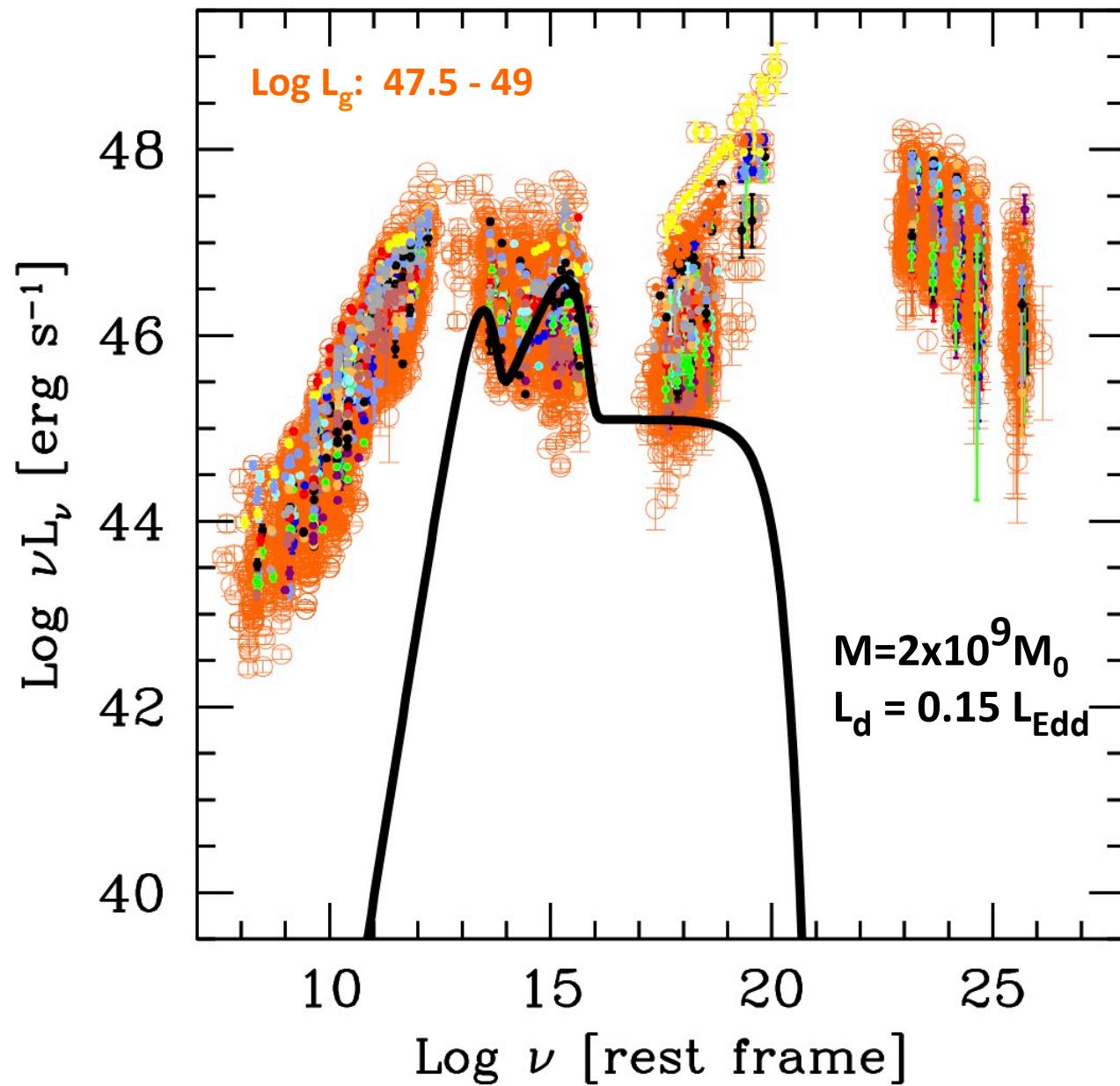


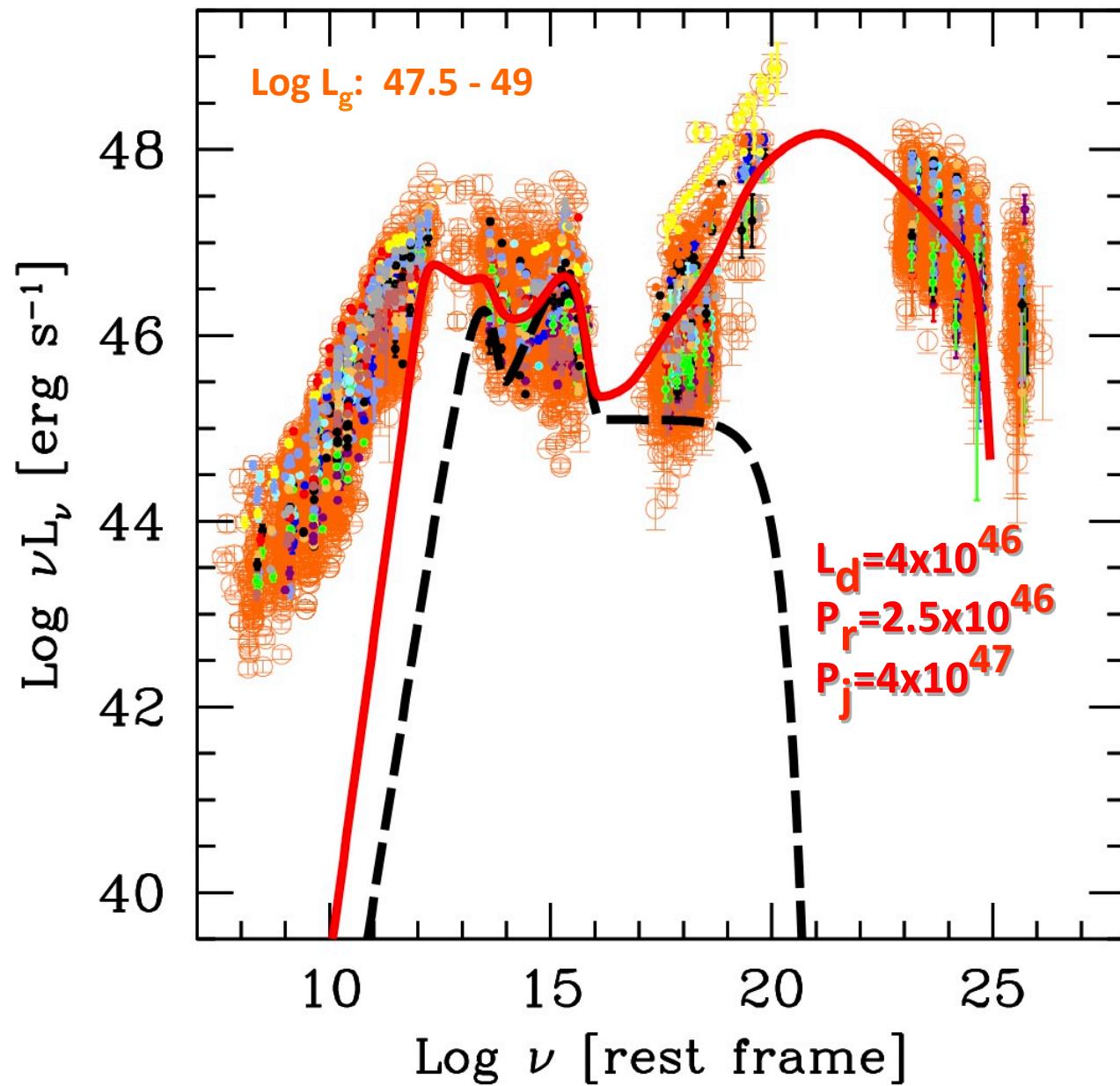
3LAC, “clean”, with z: 745 blazars

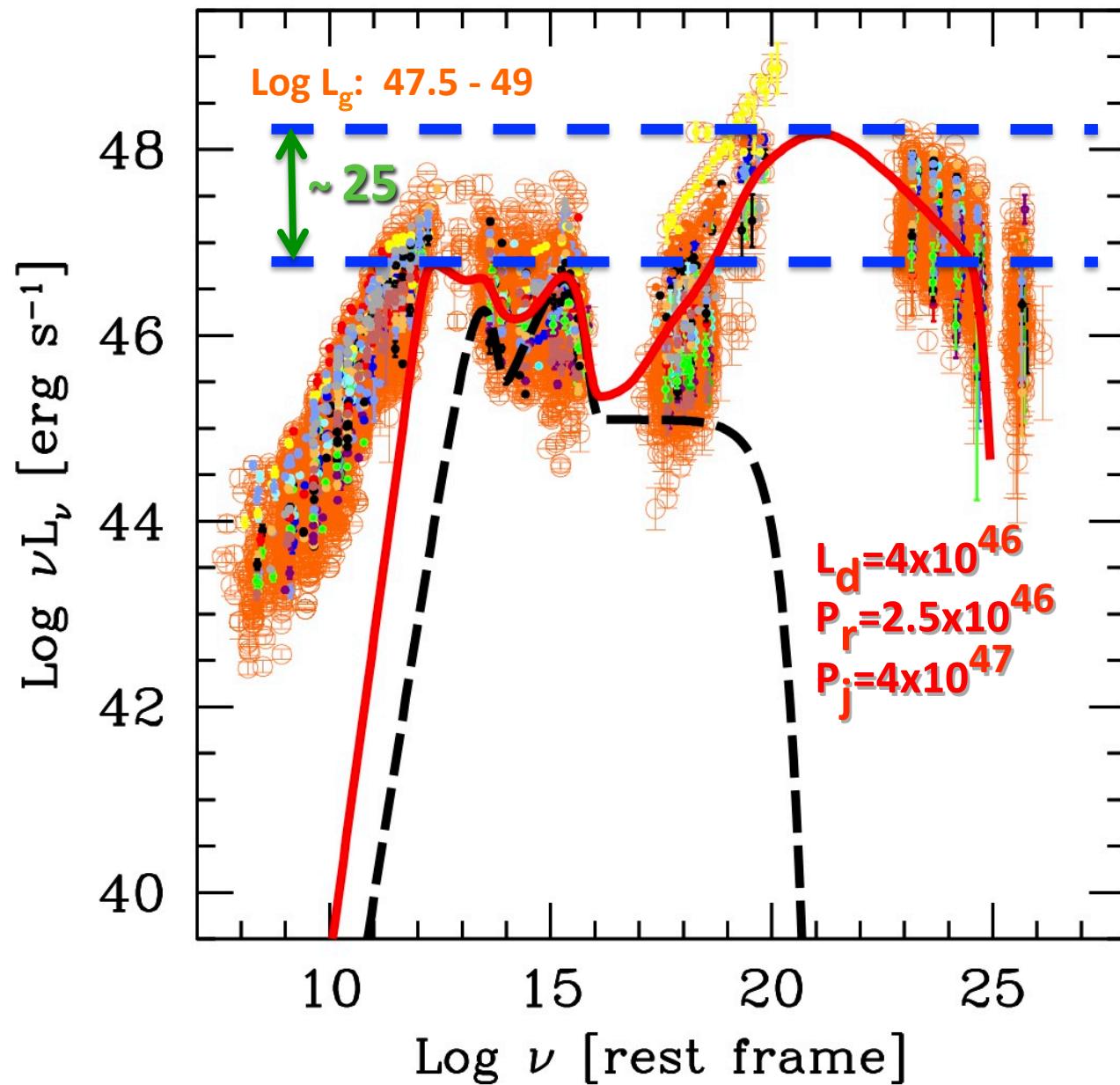


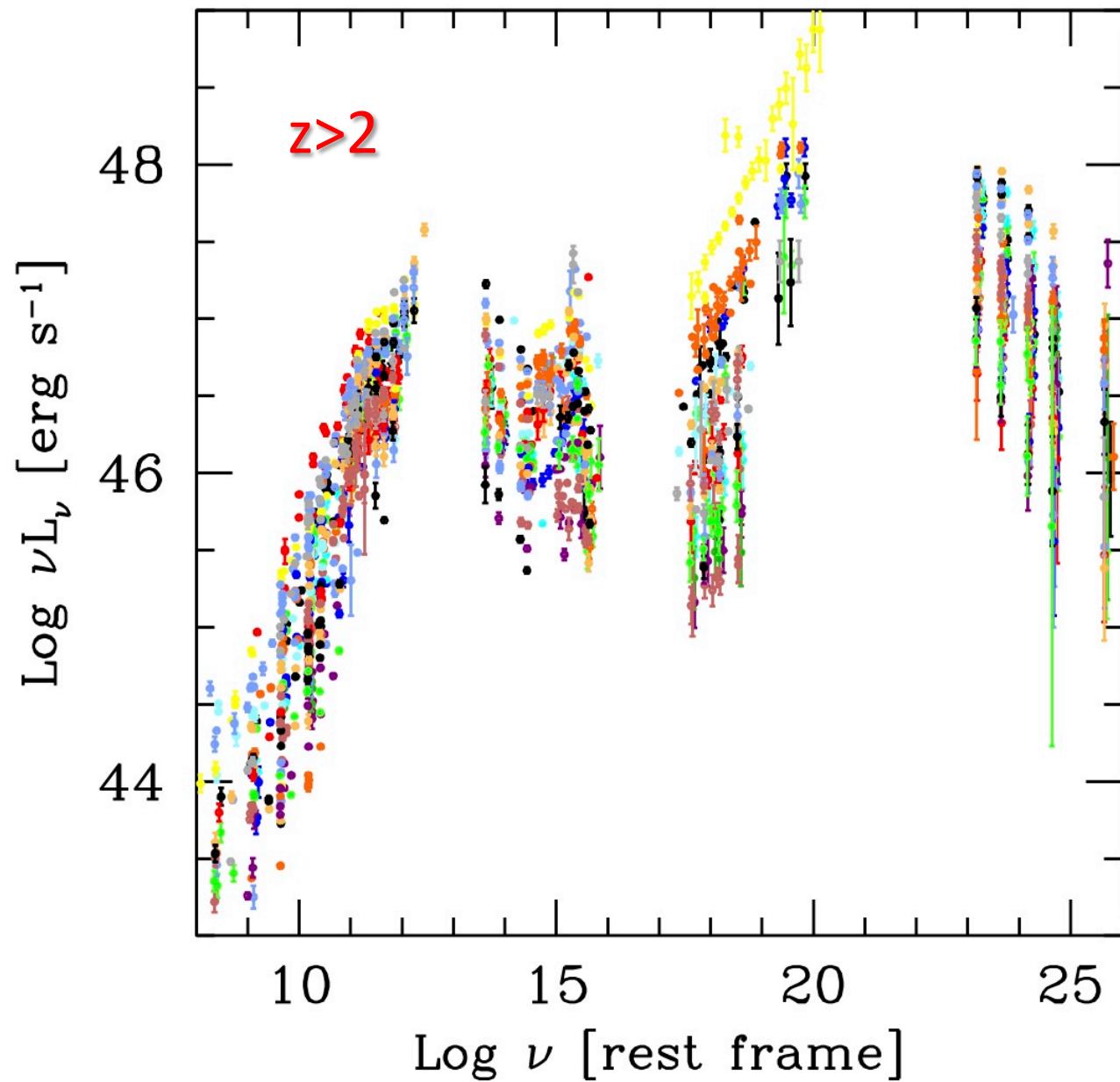


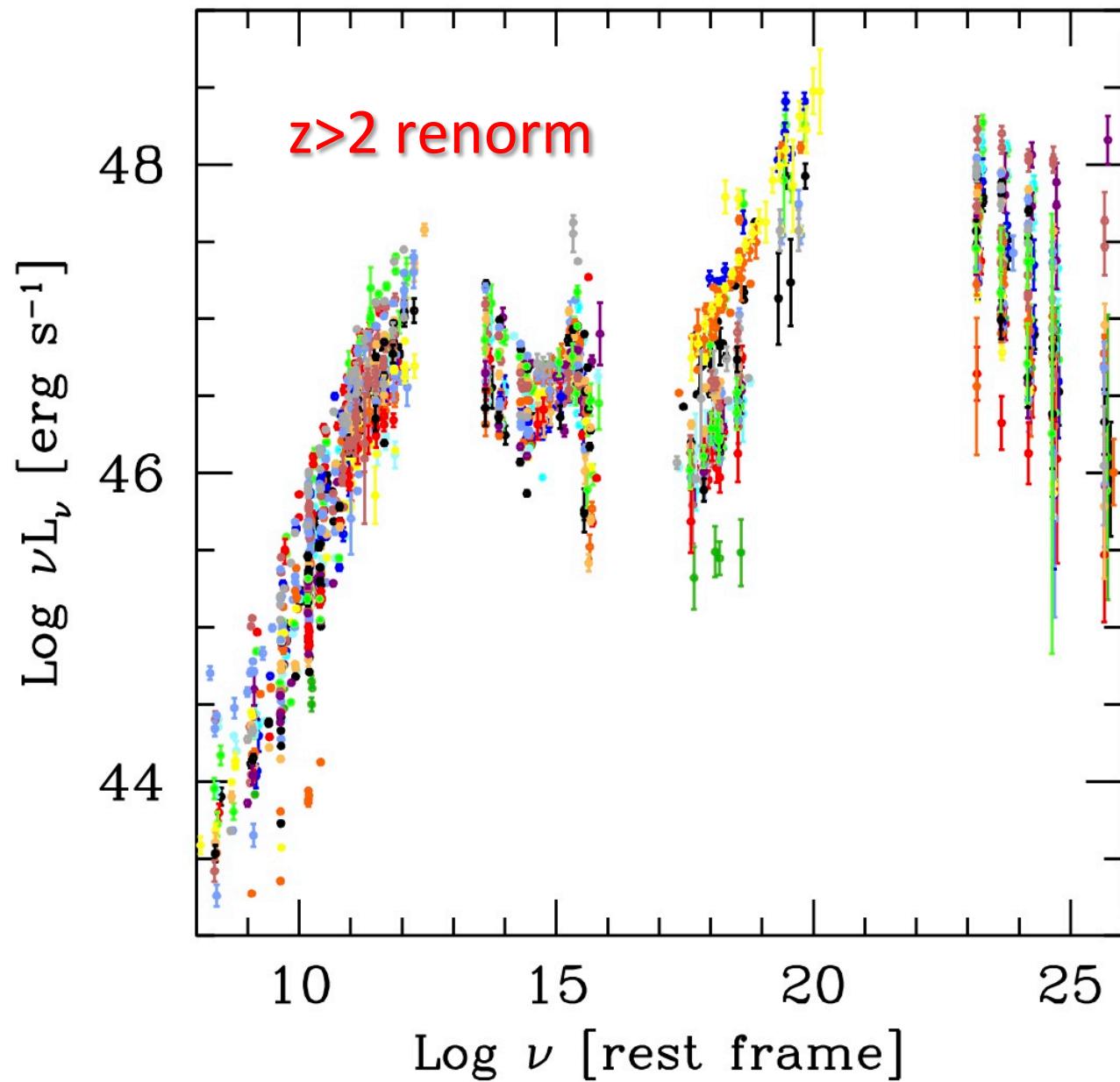


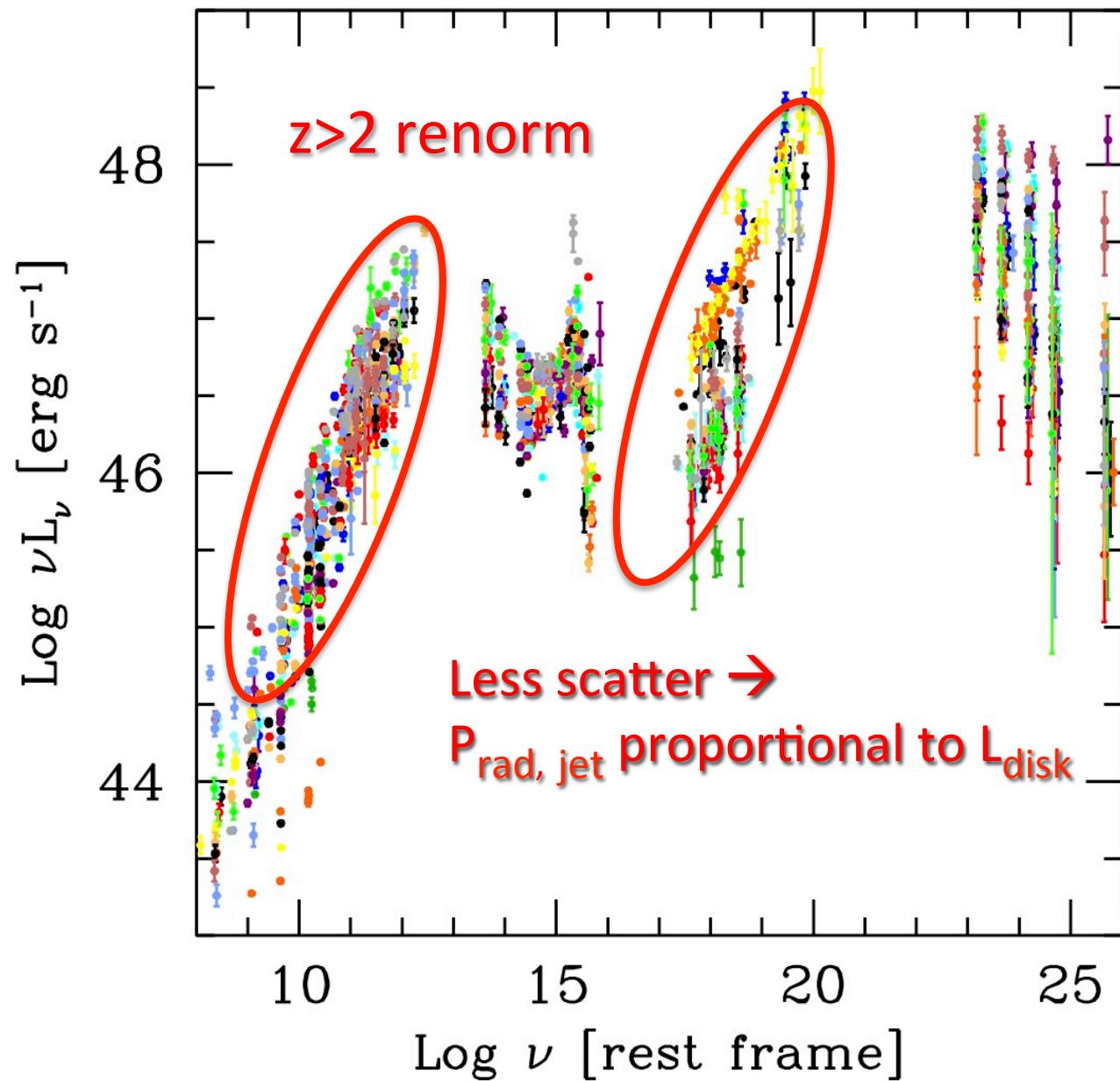


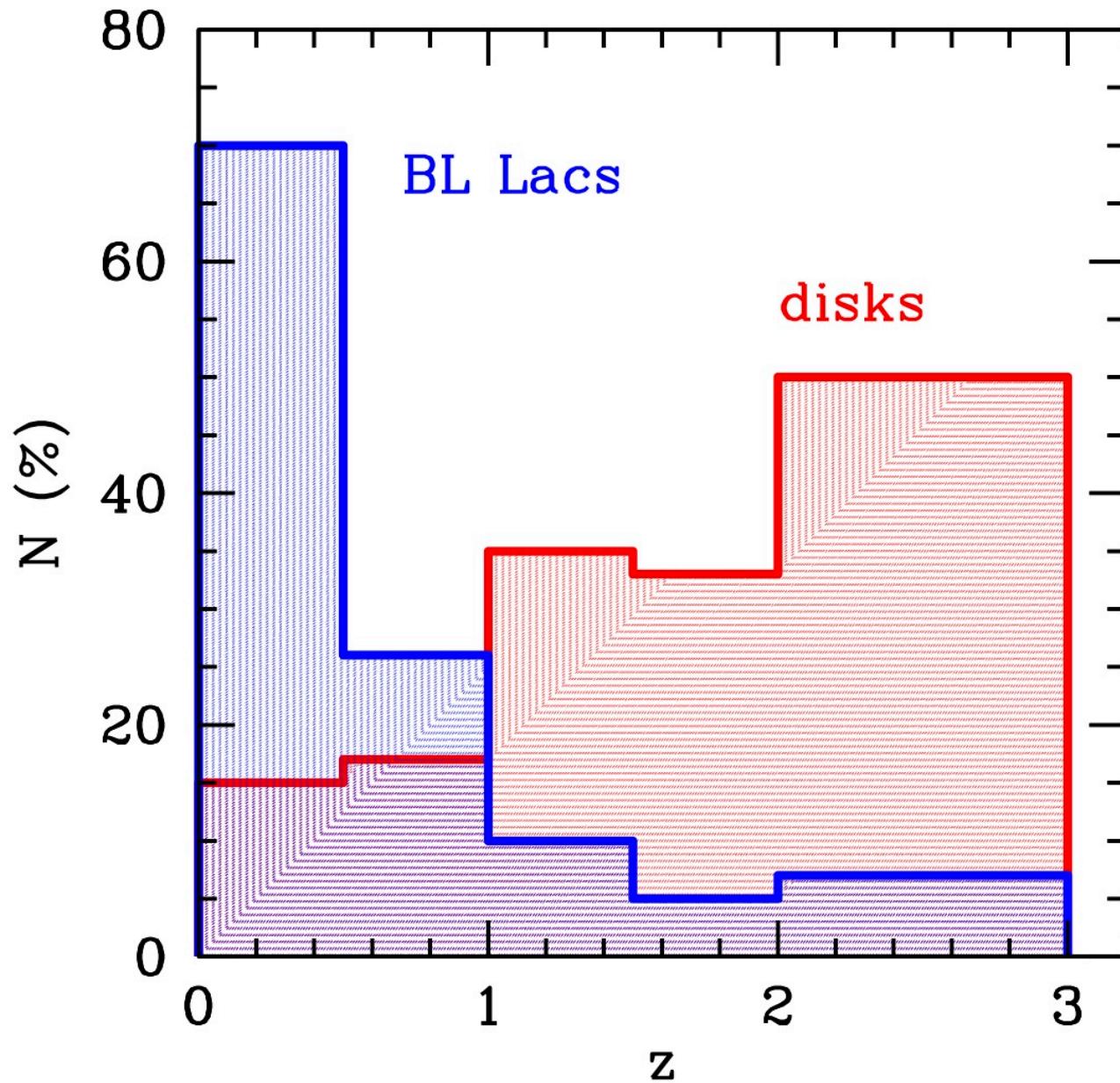


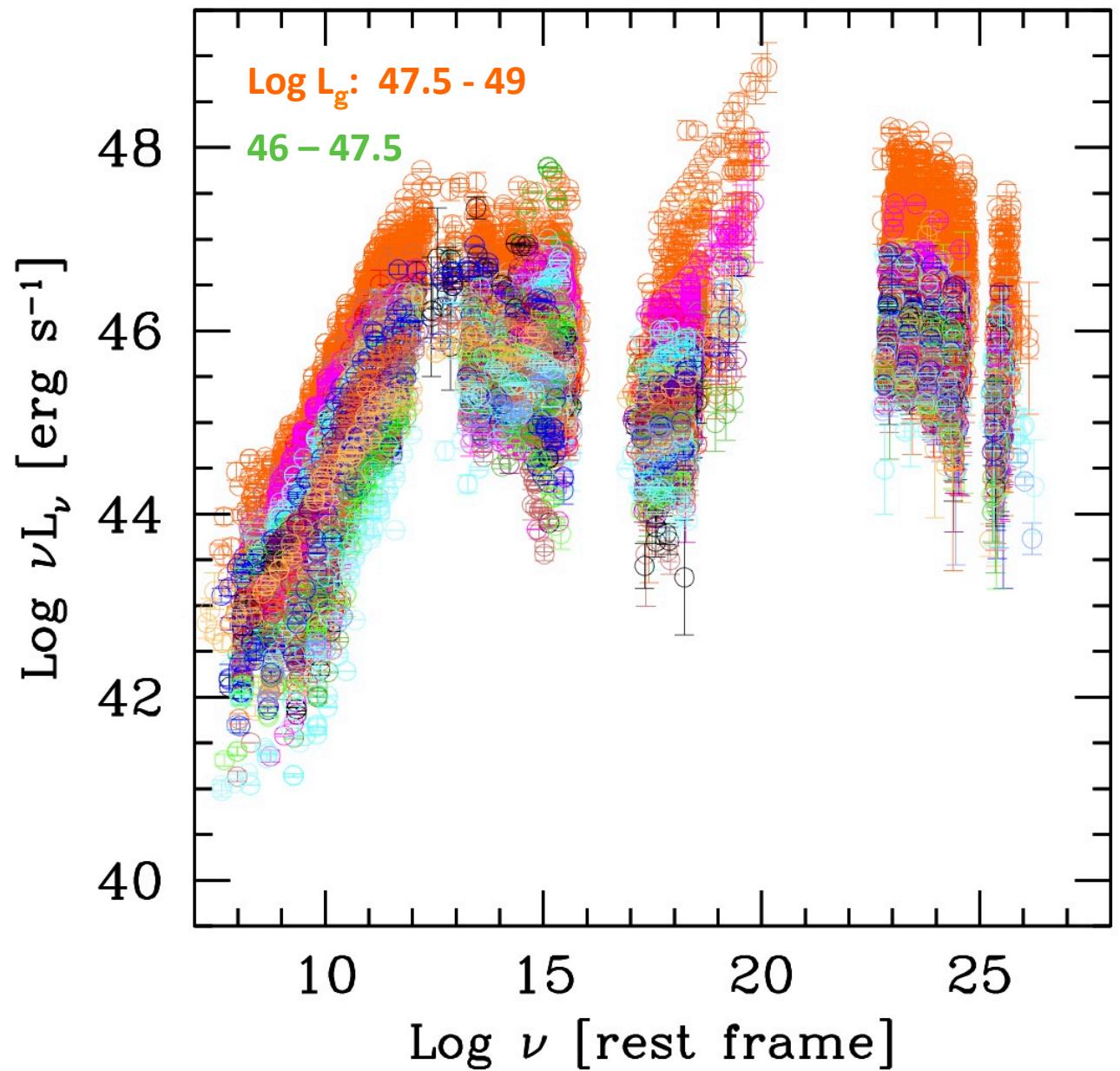




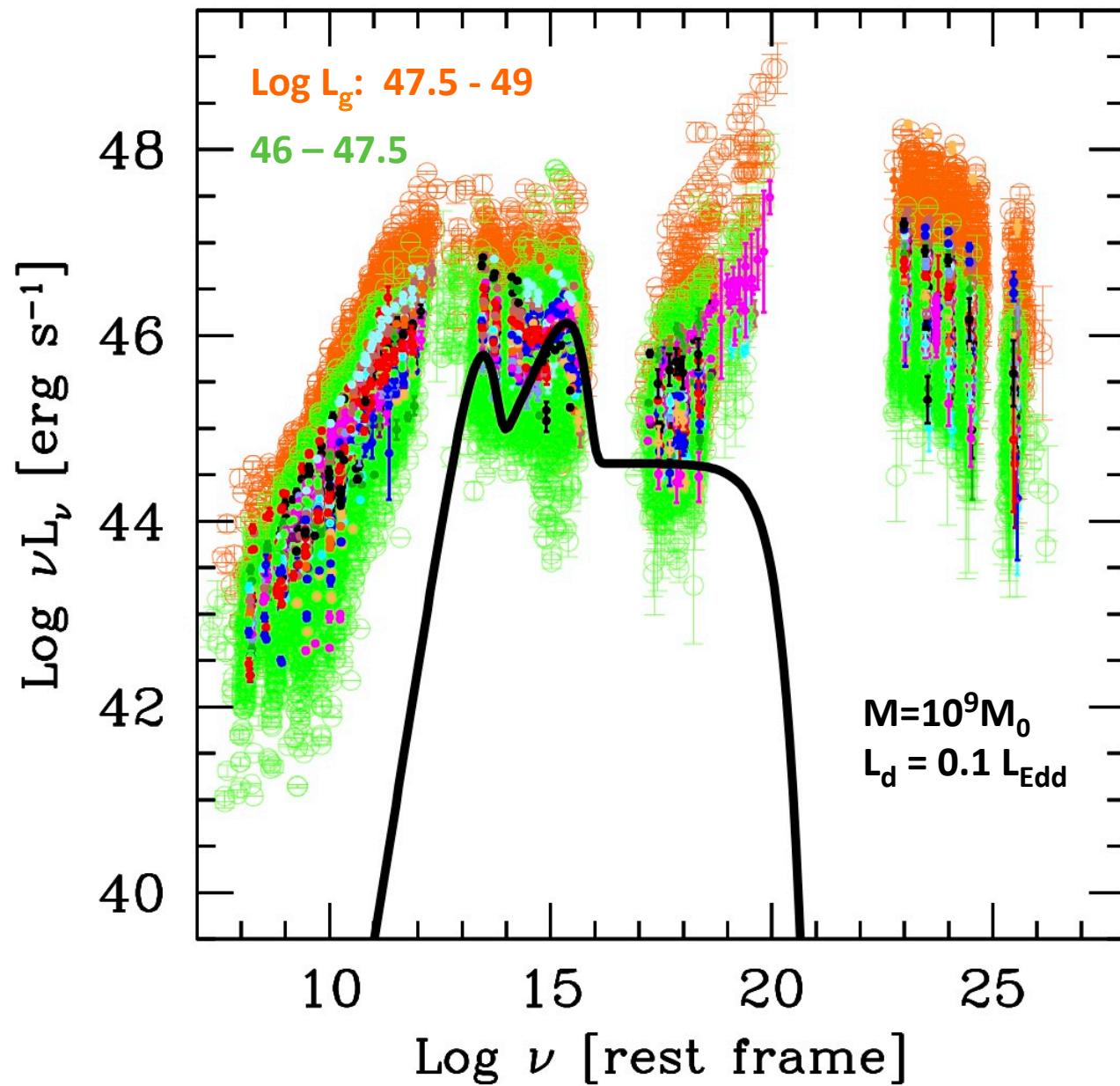


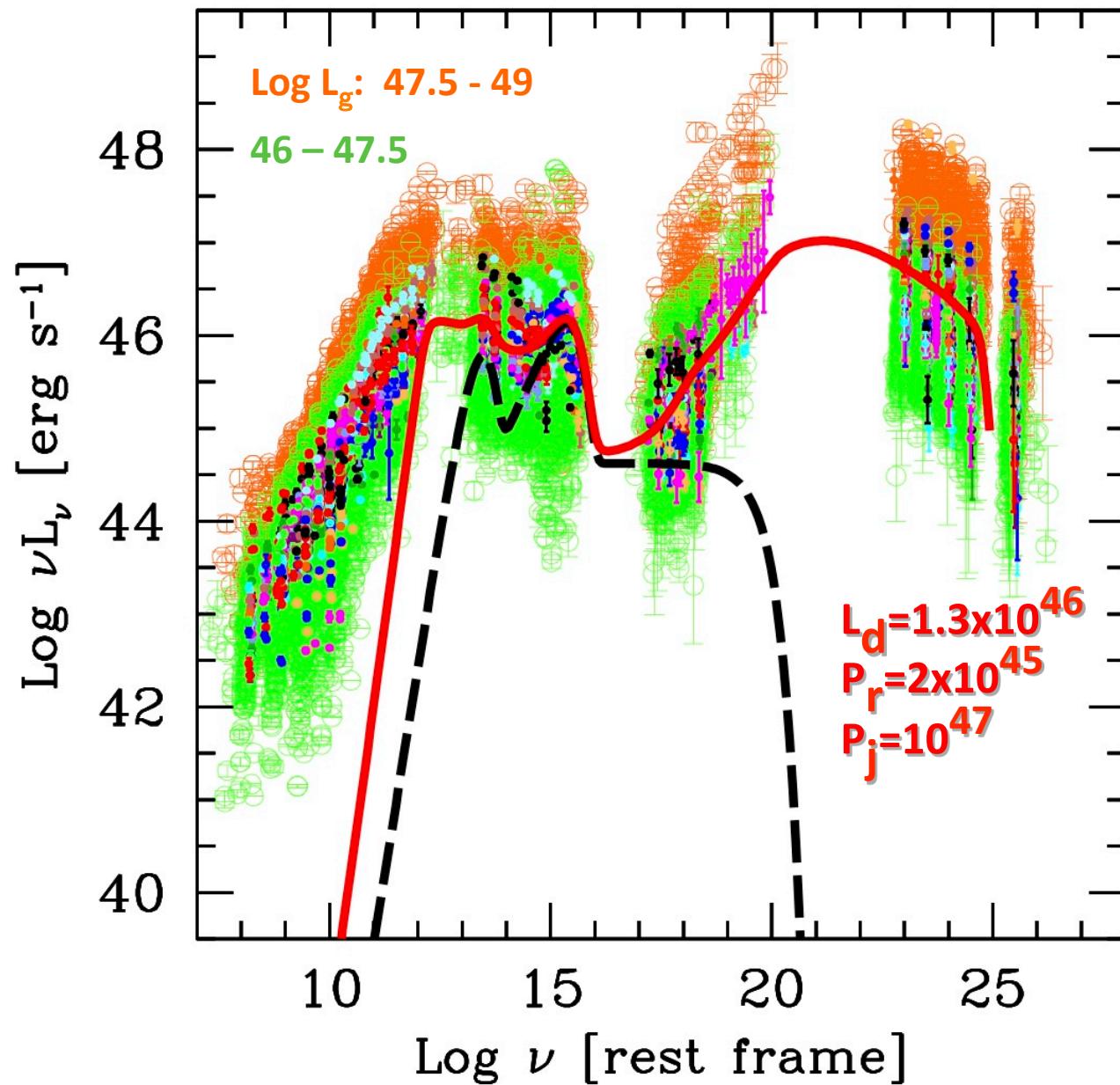


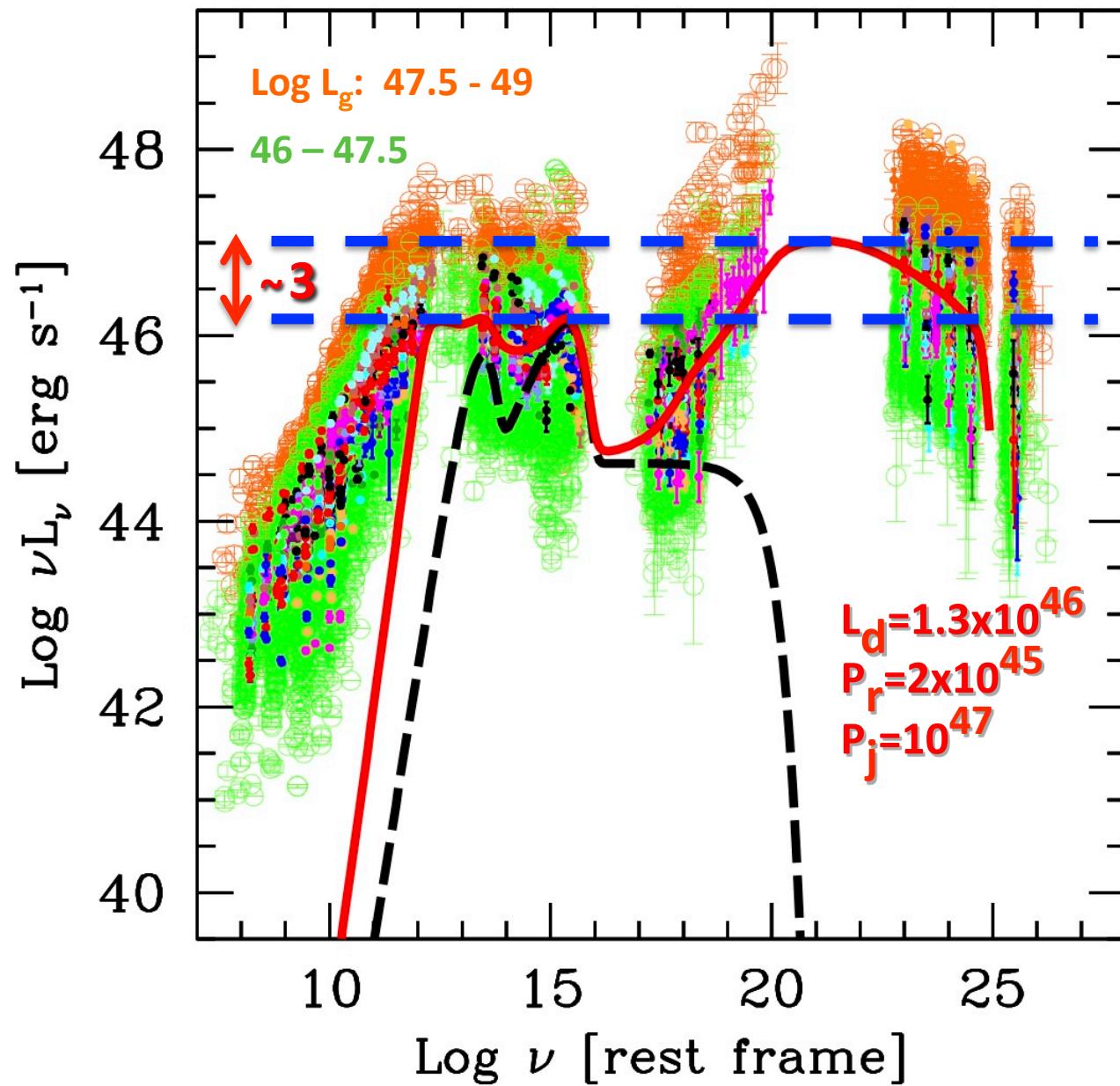


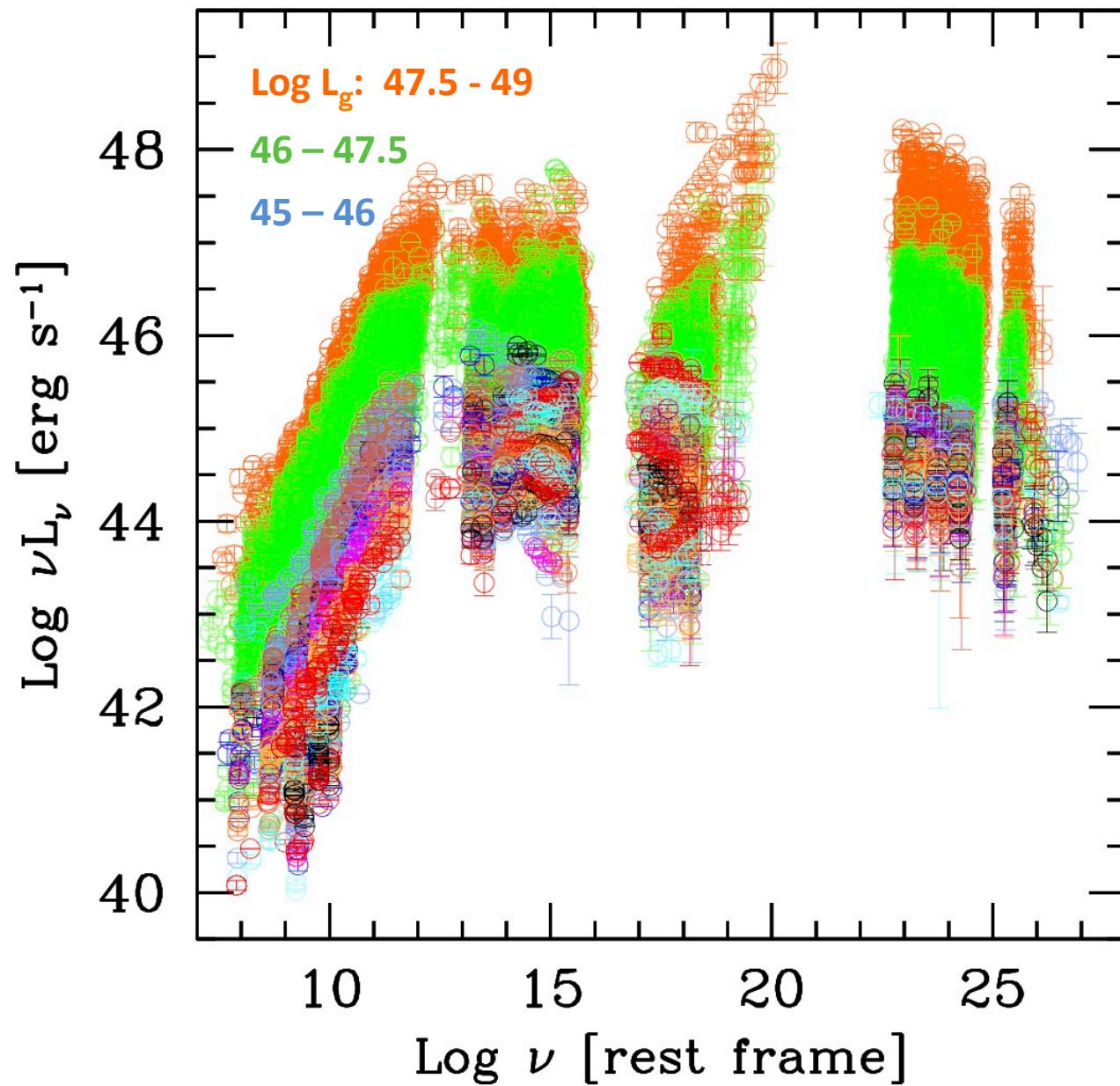


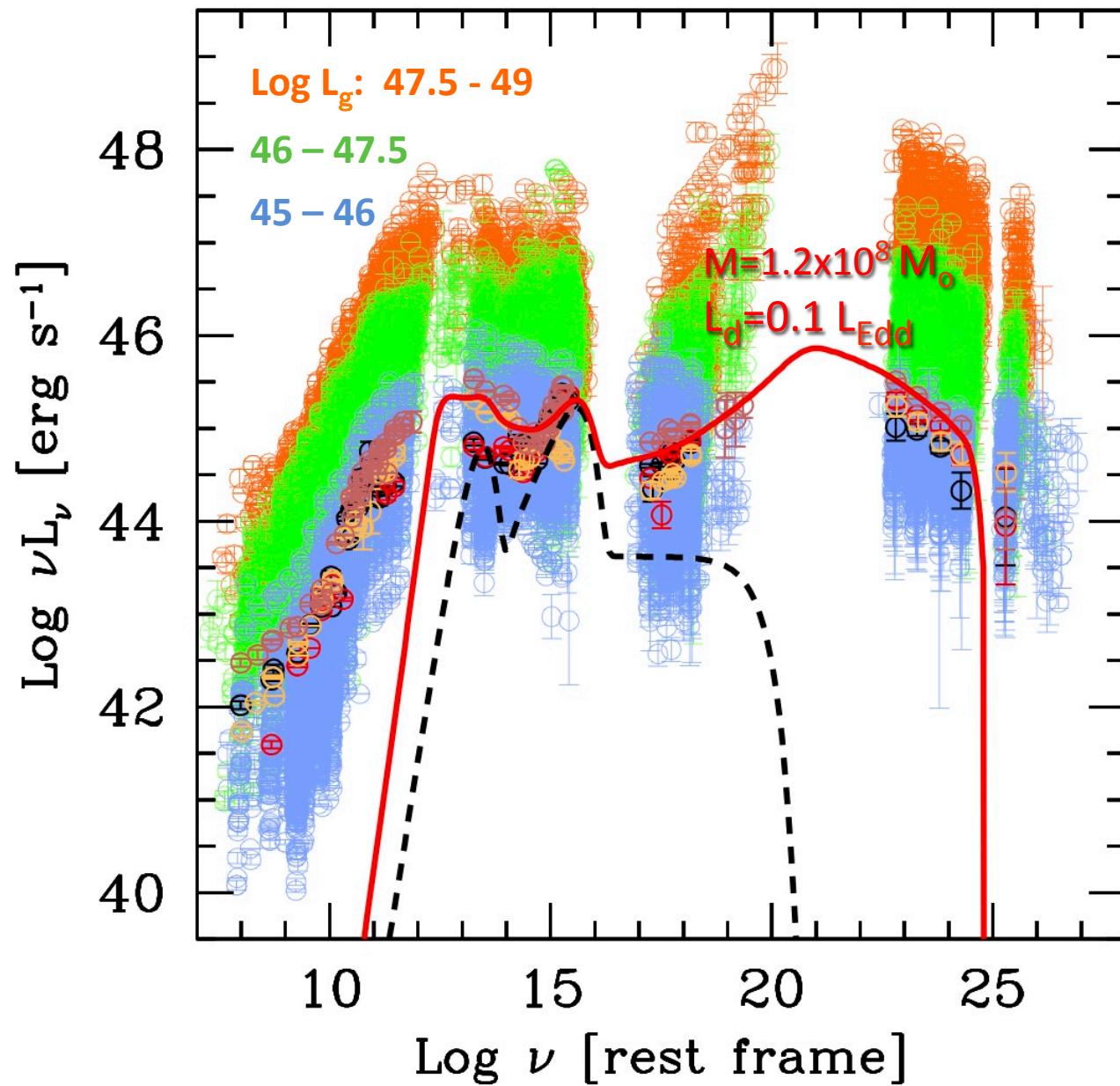
Missoni

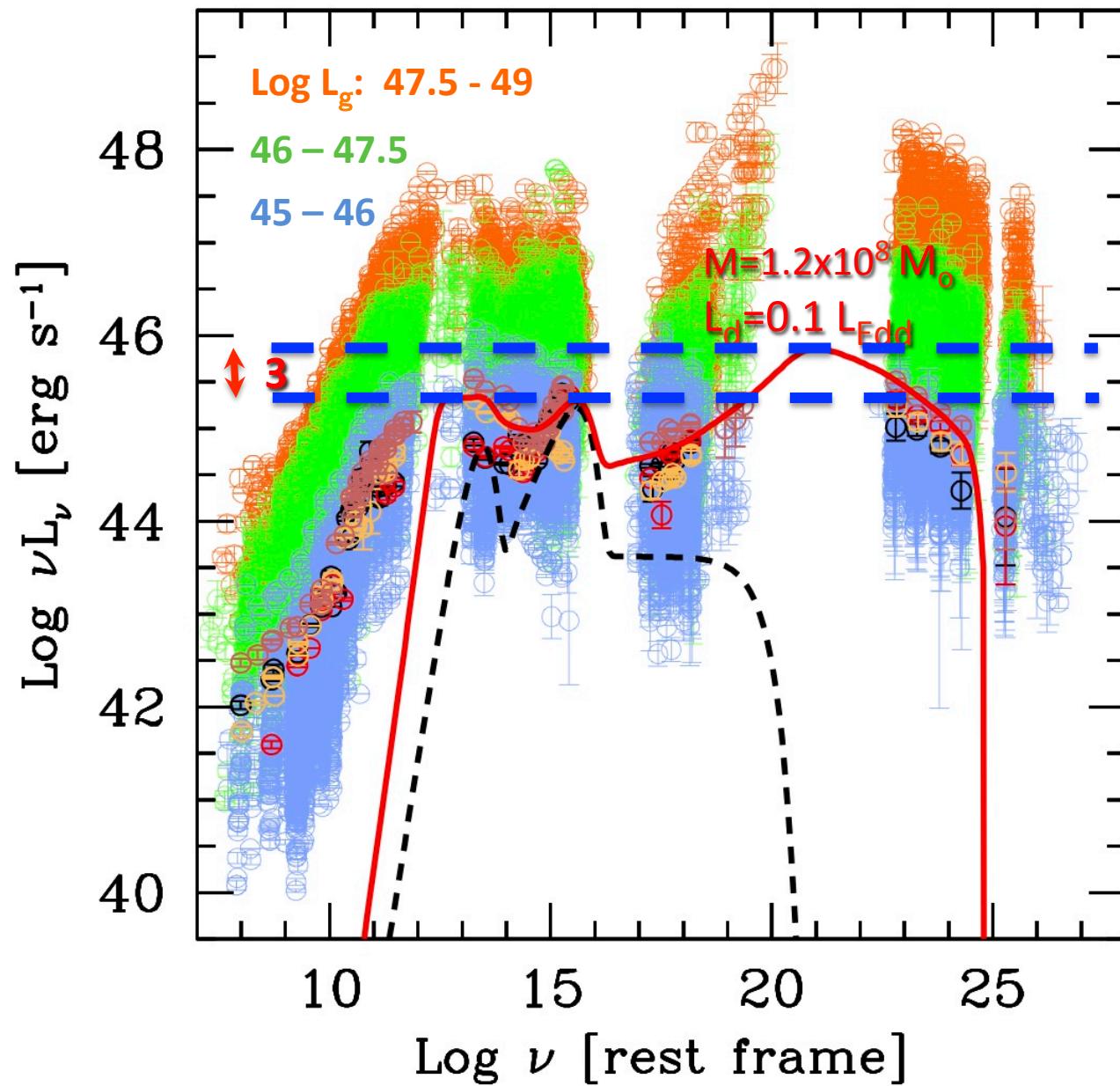


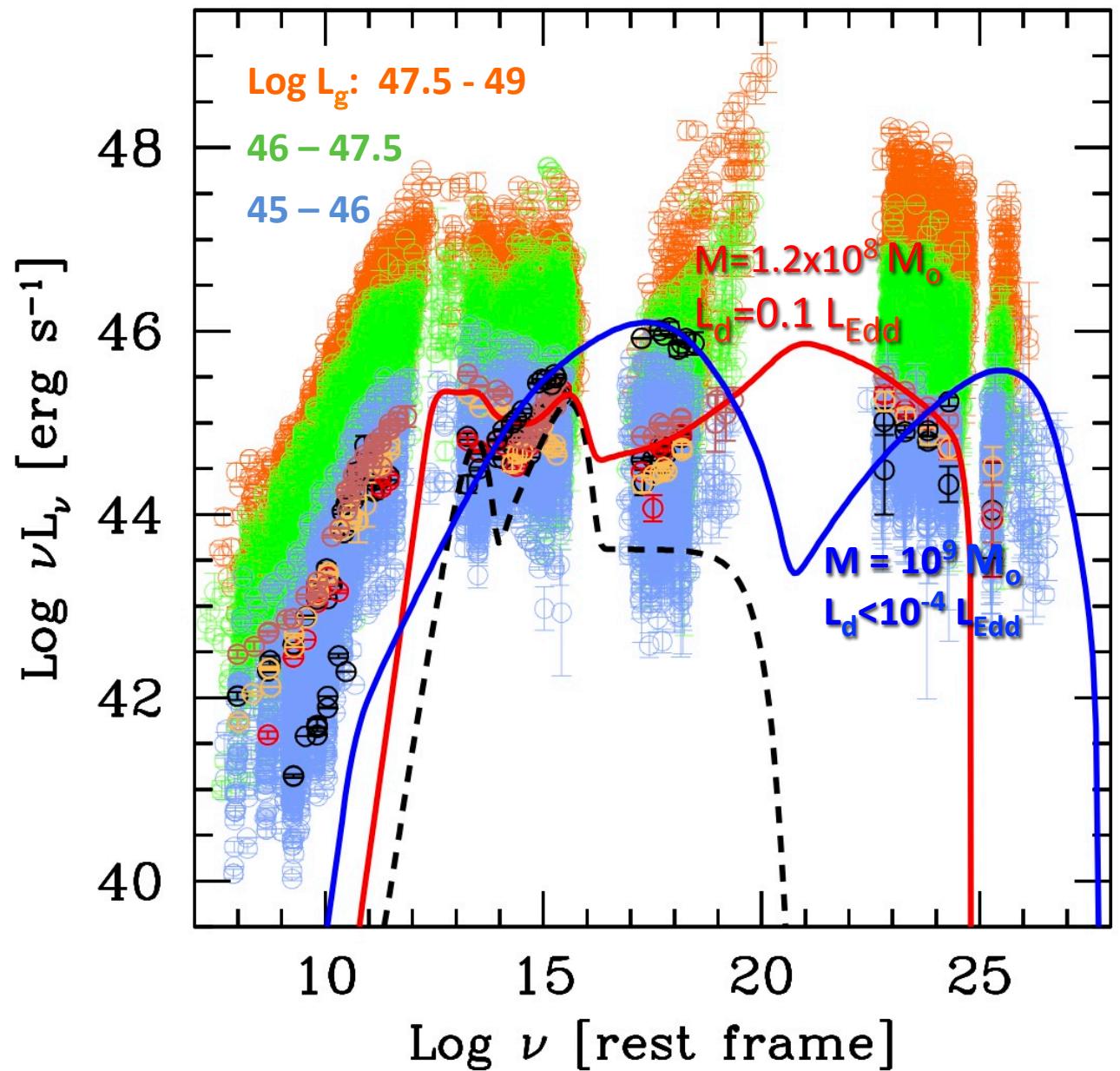




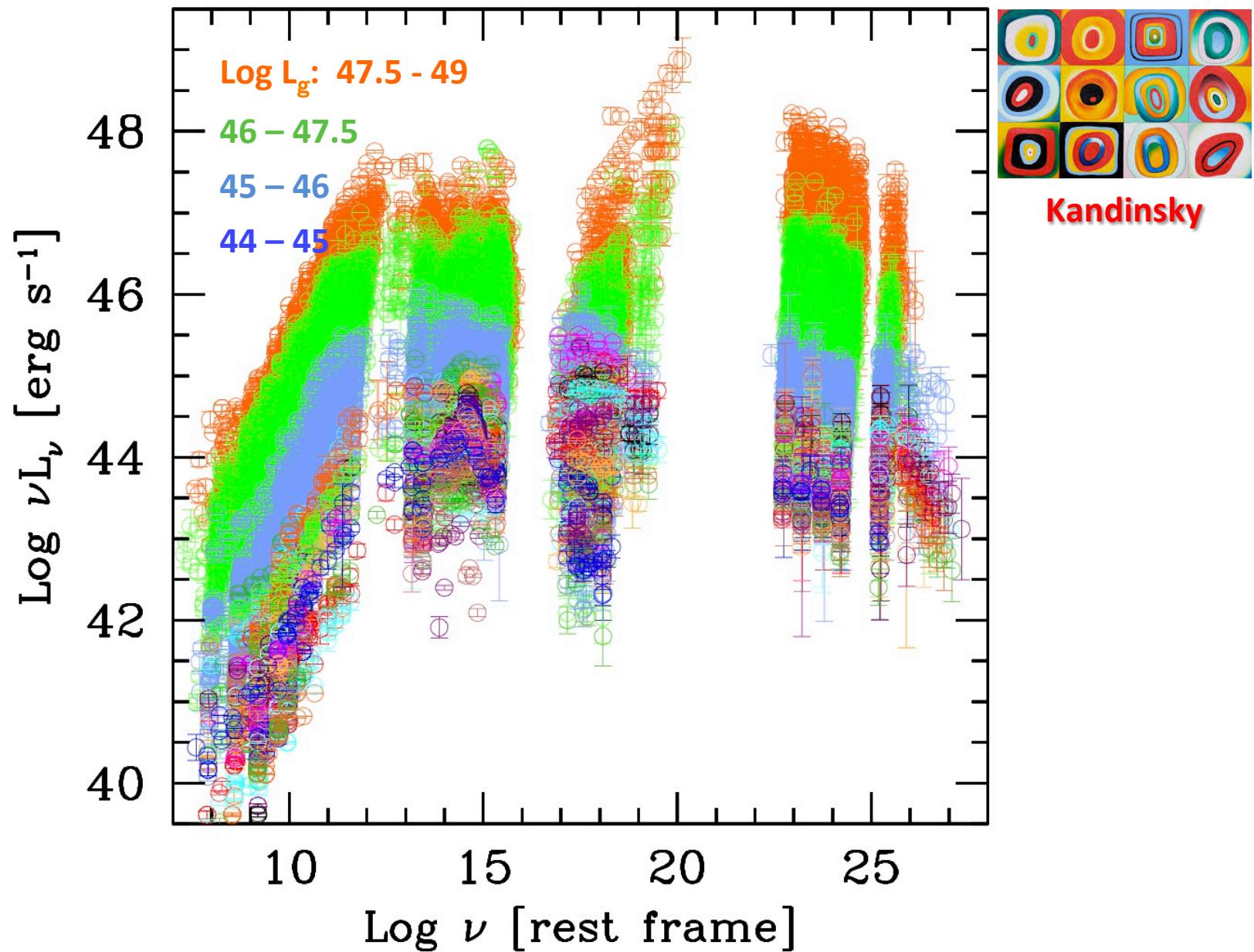


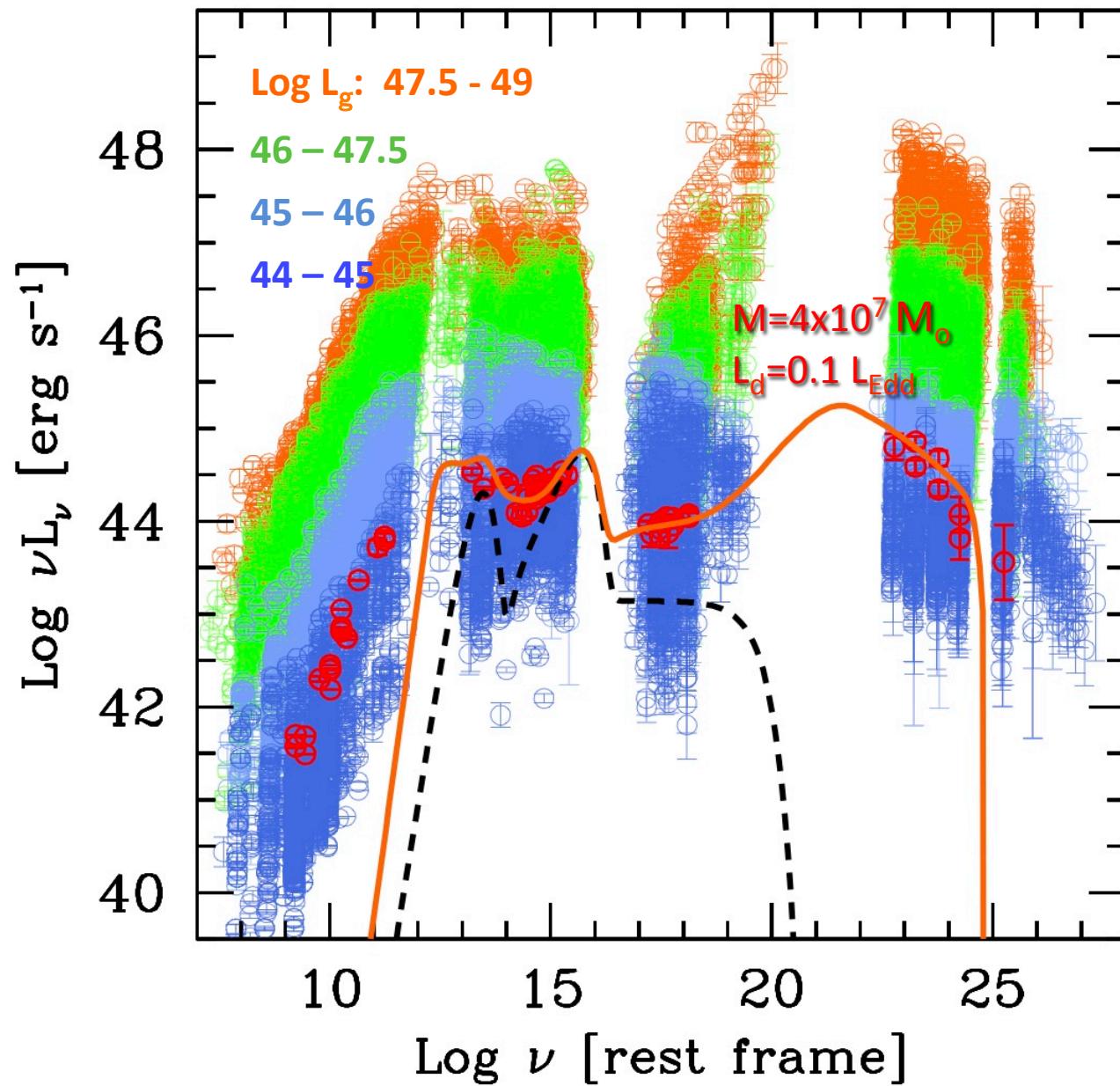


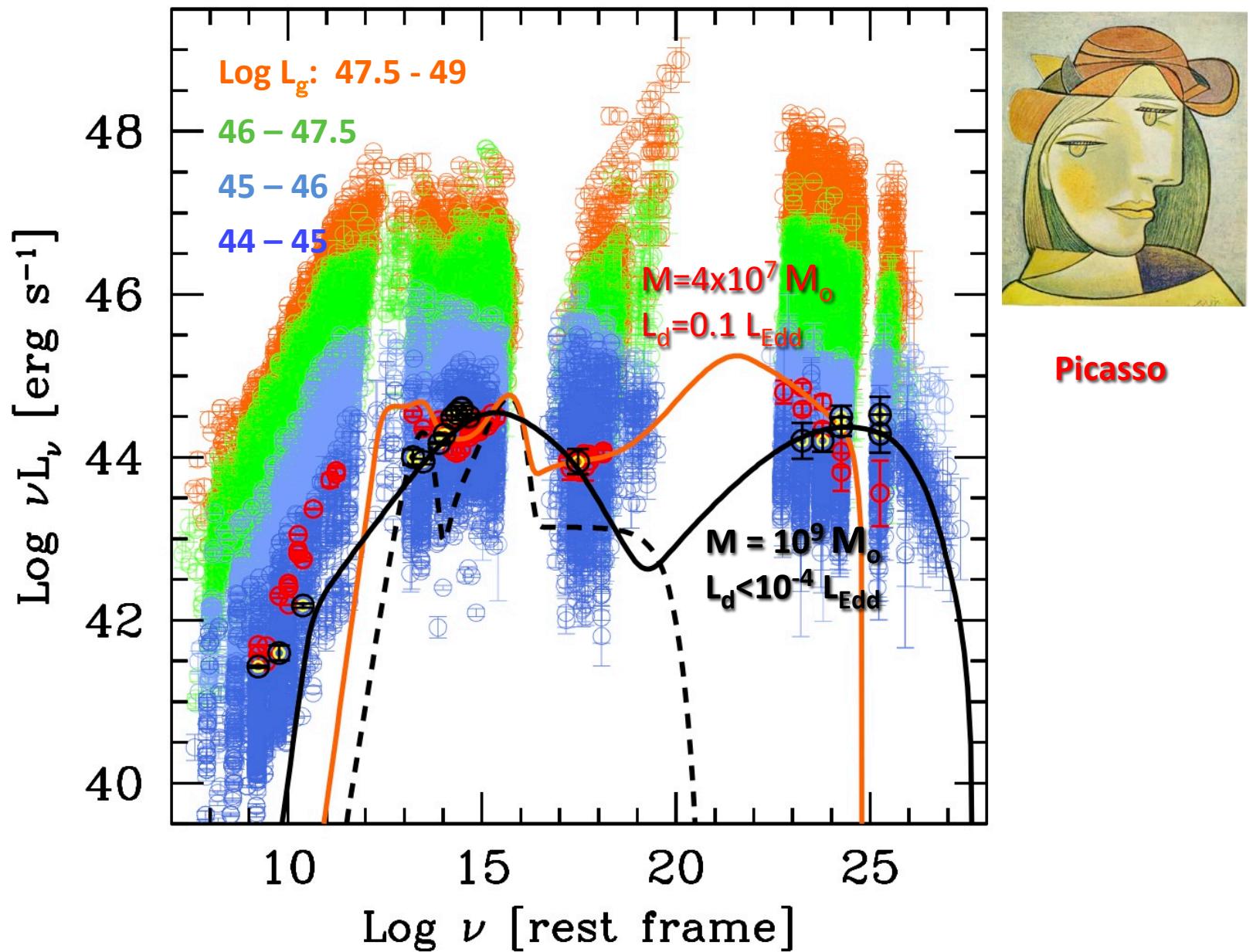


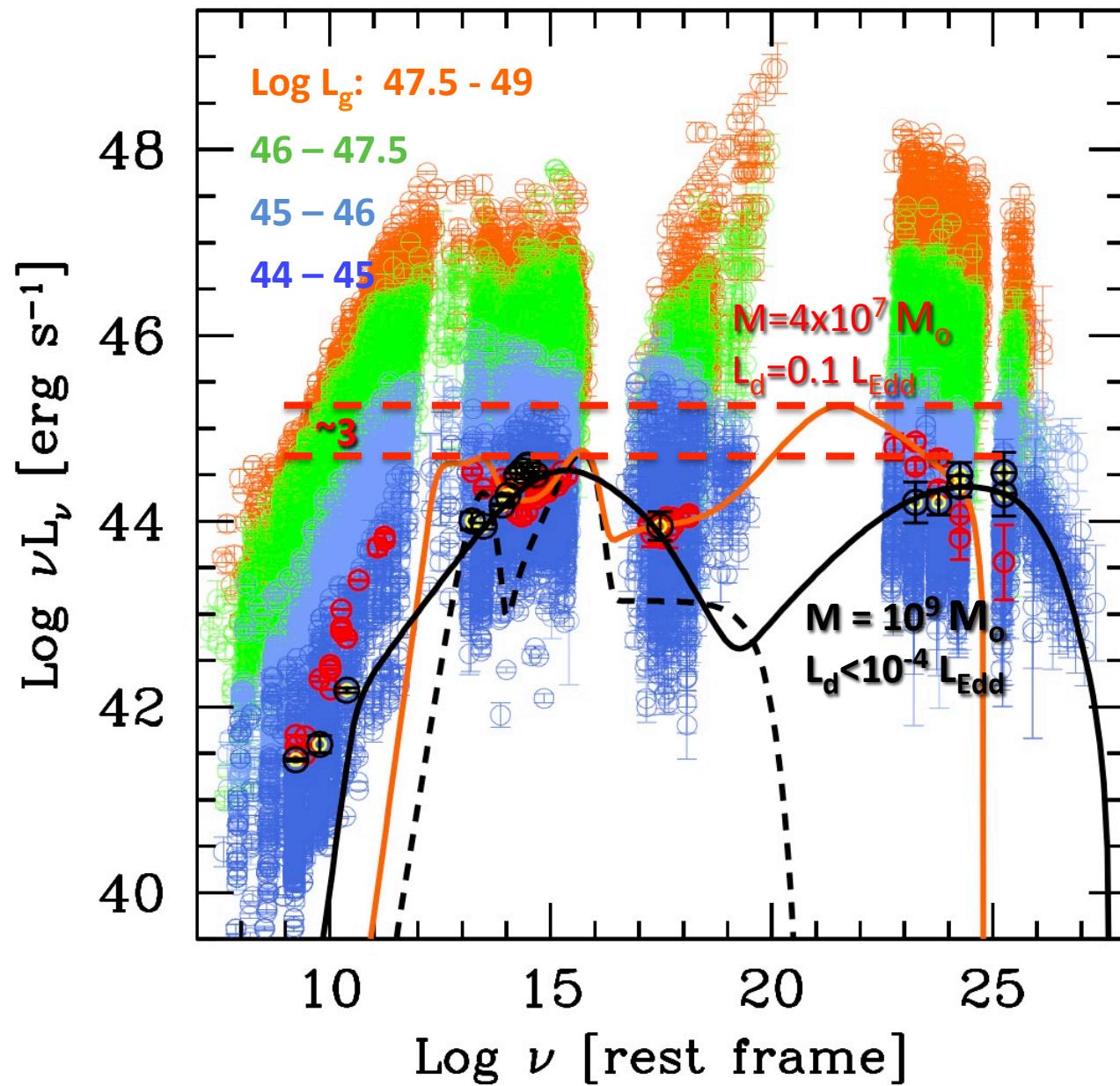


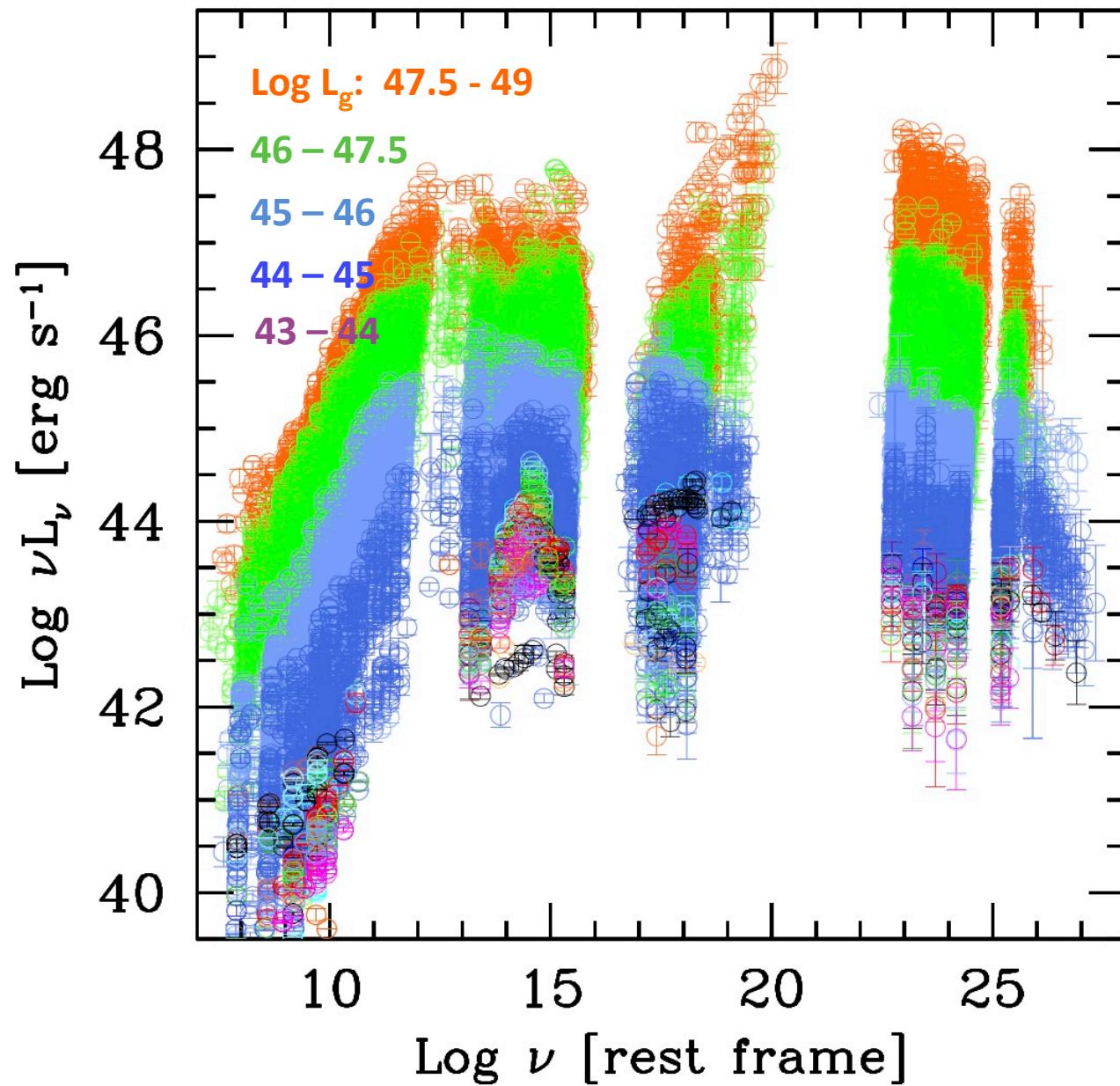
Picasso

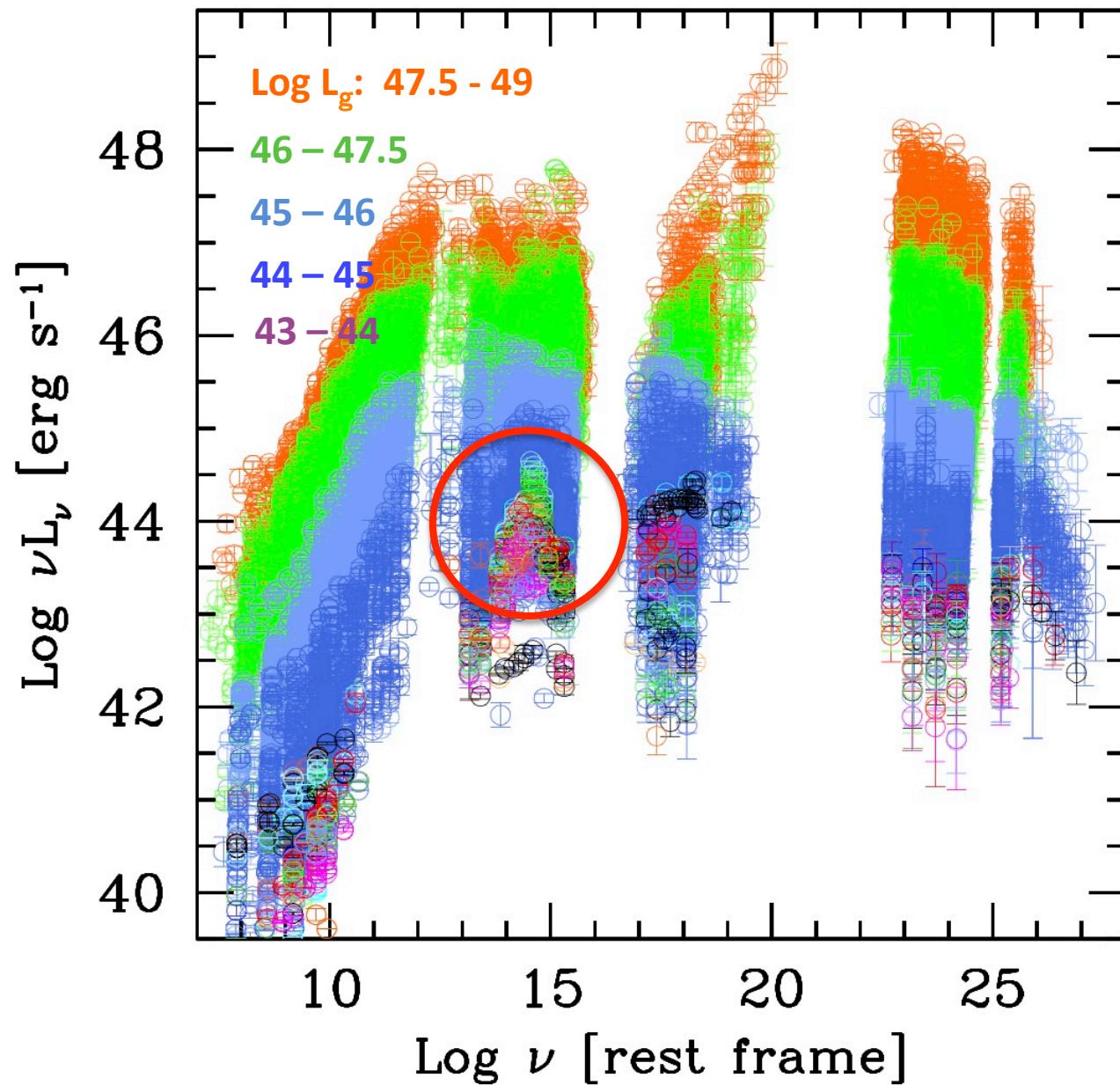


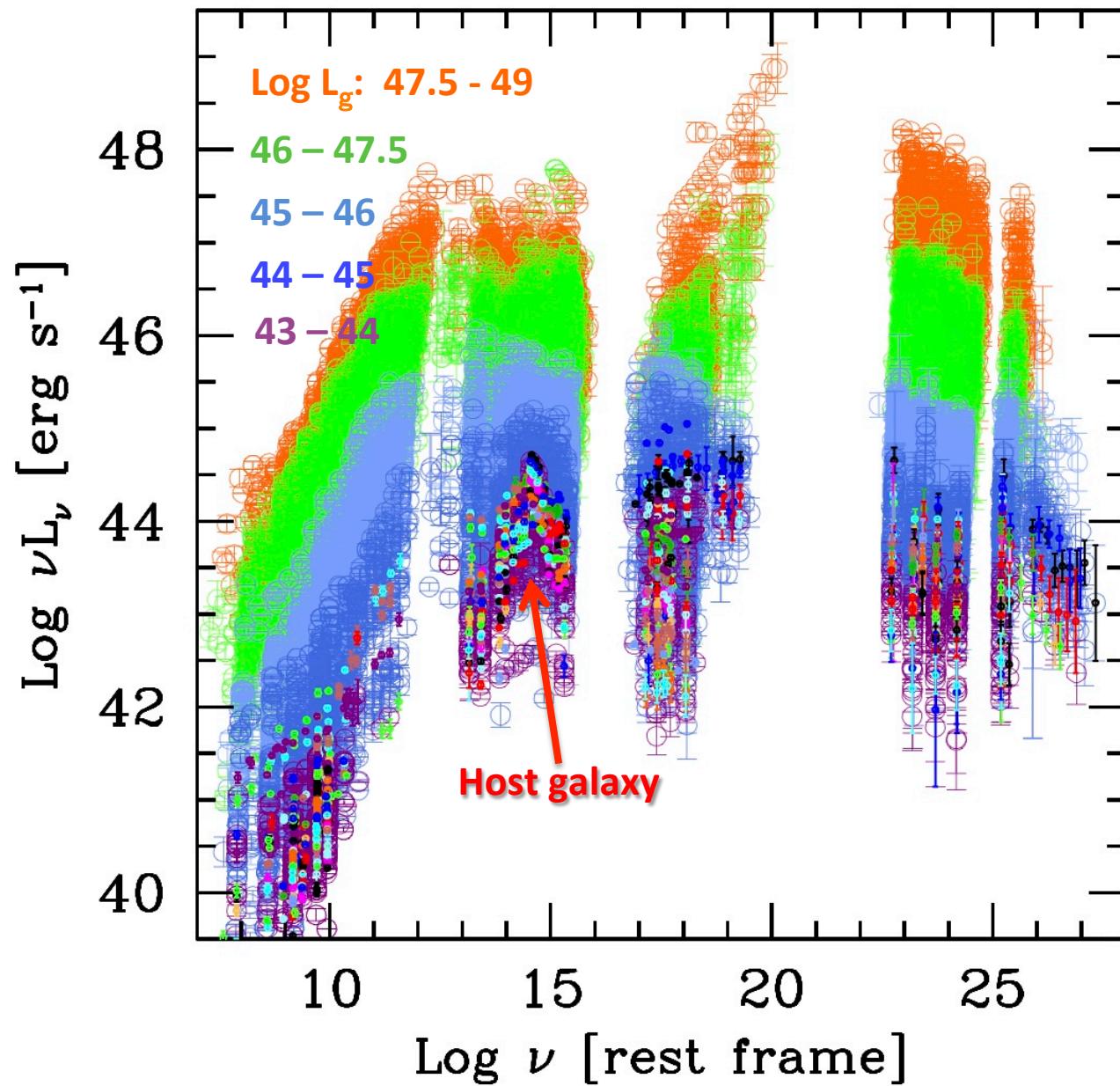


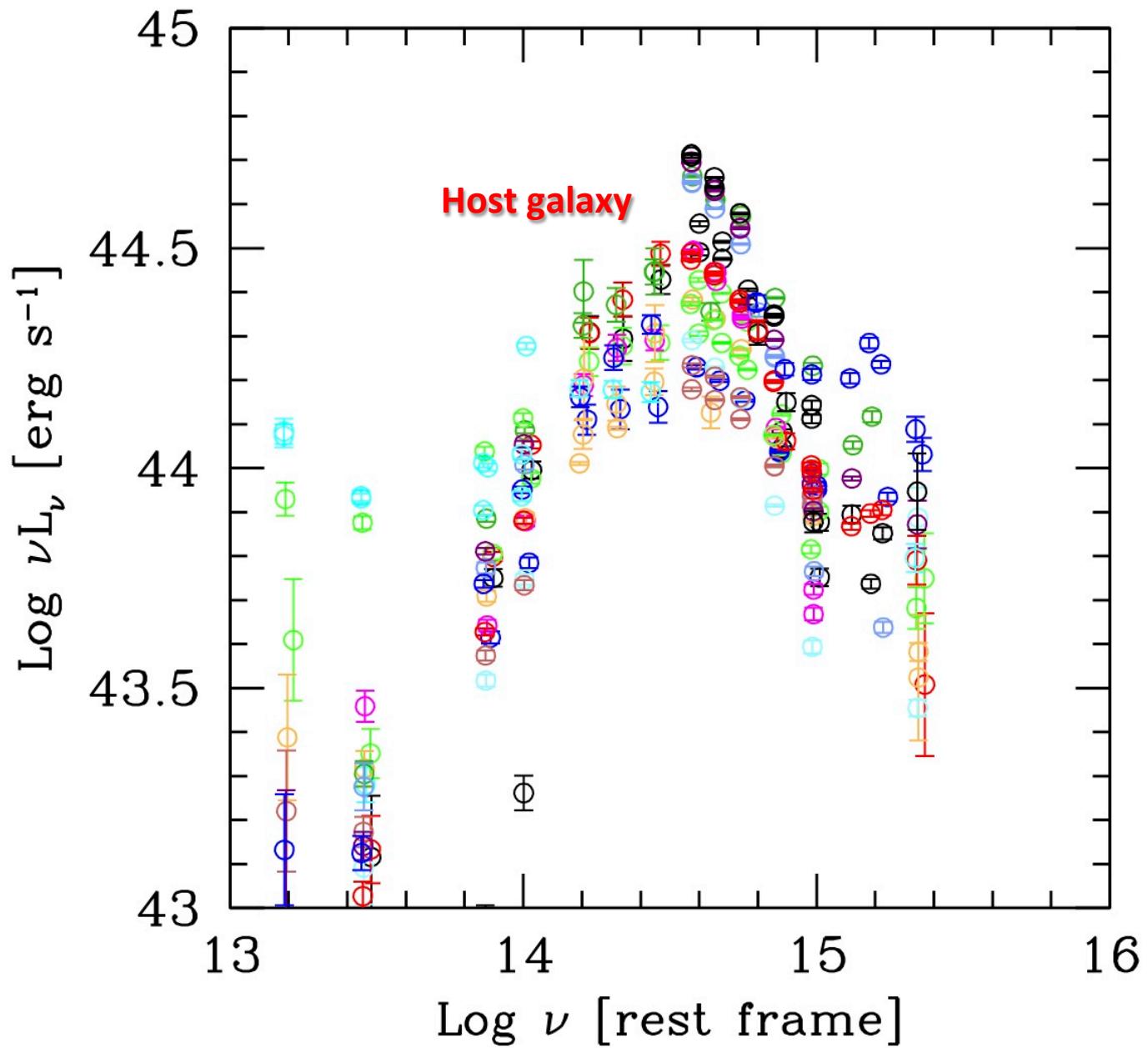






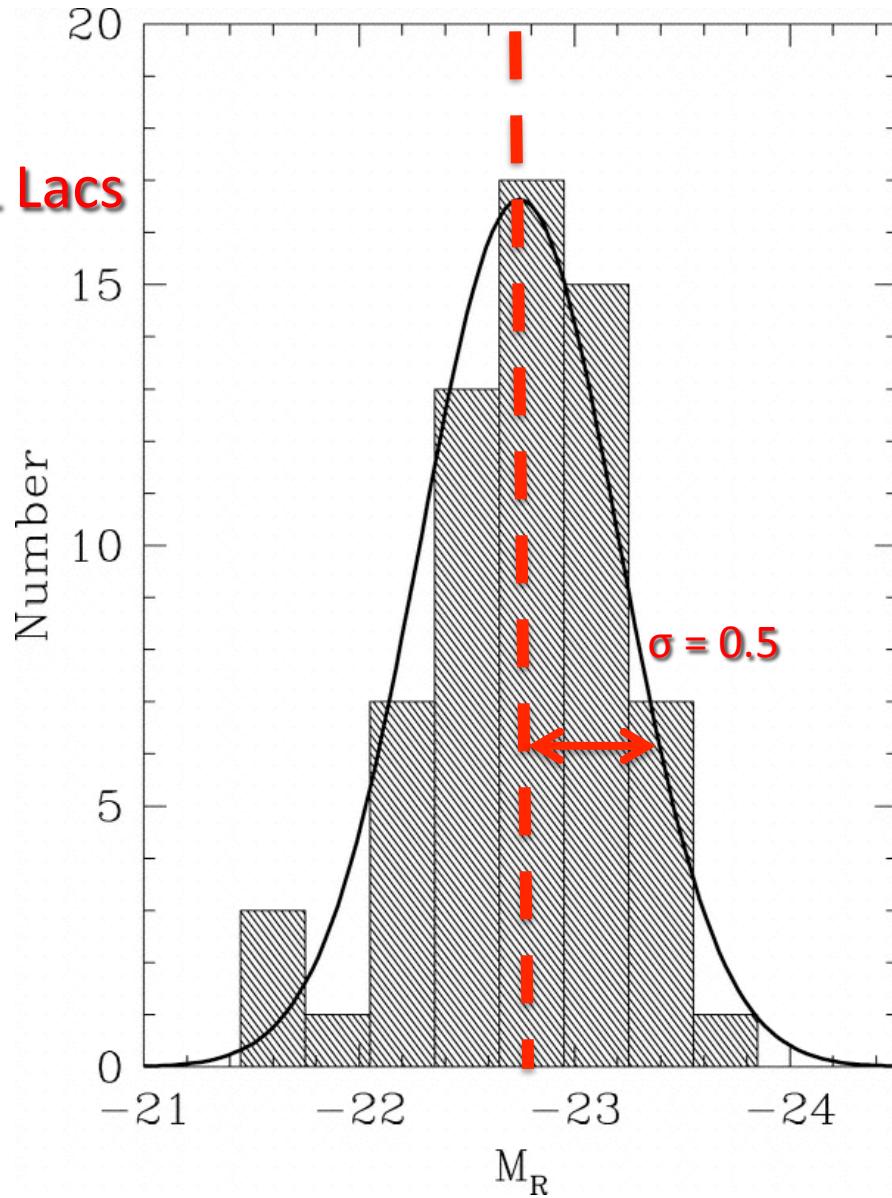


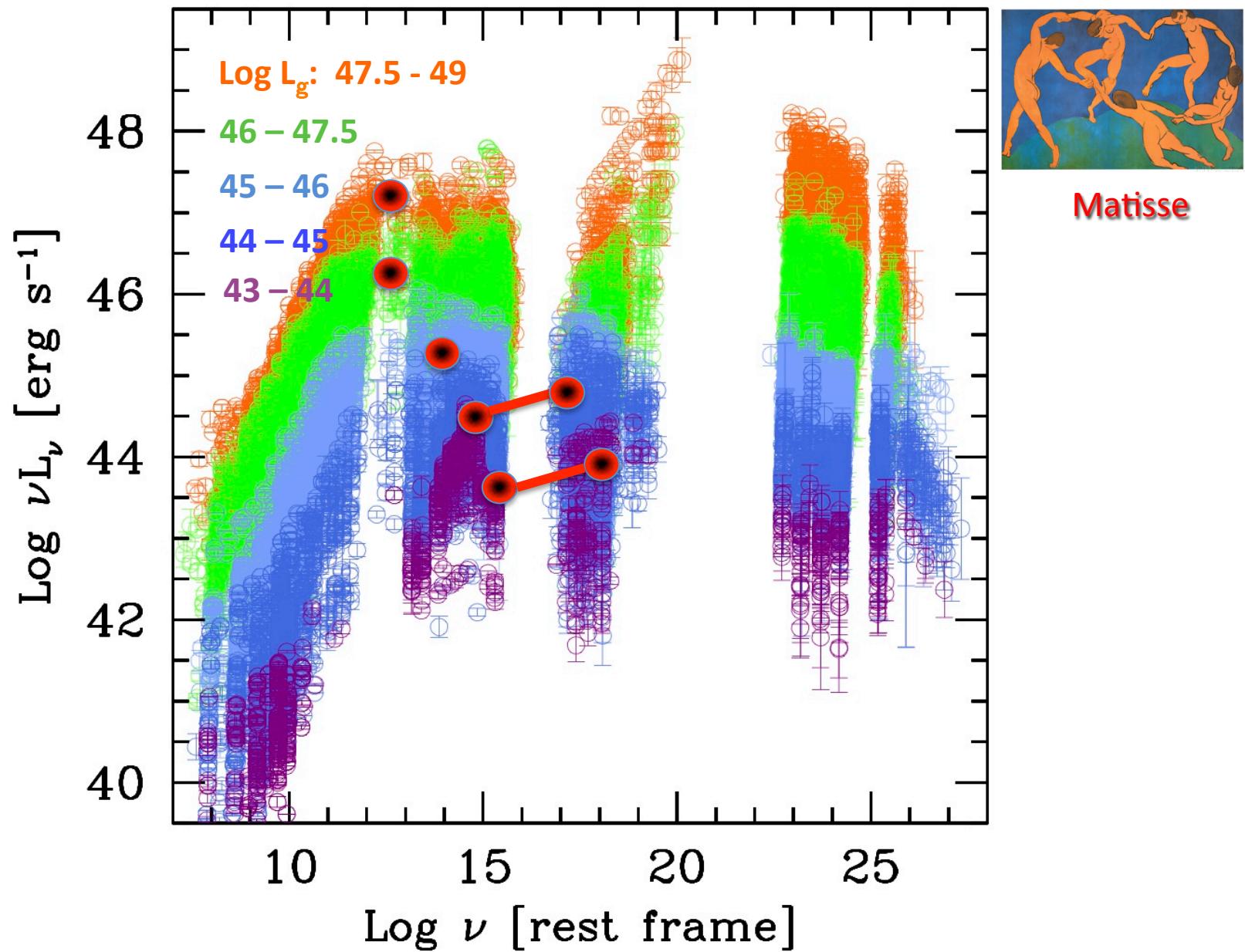


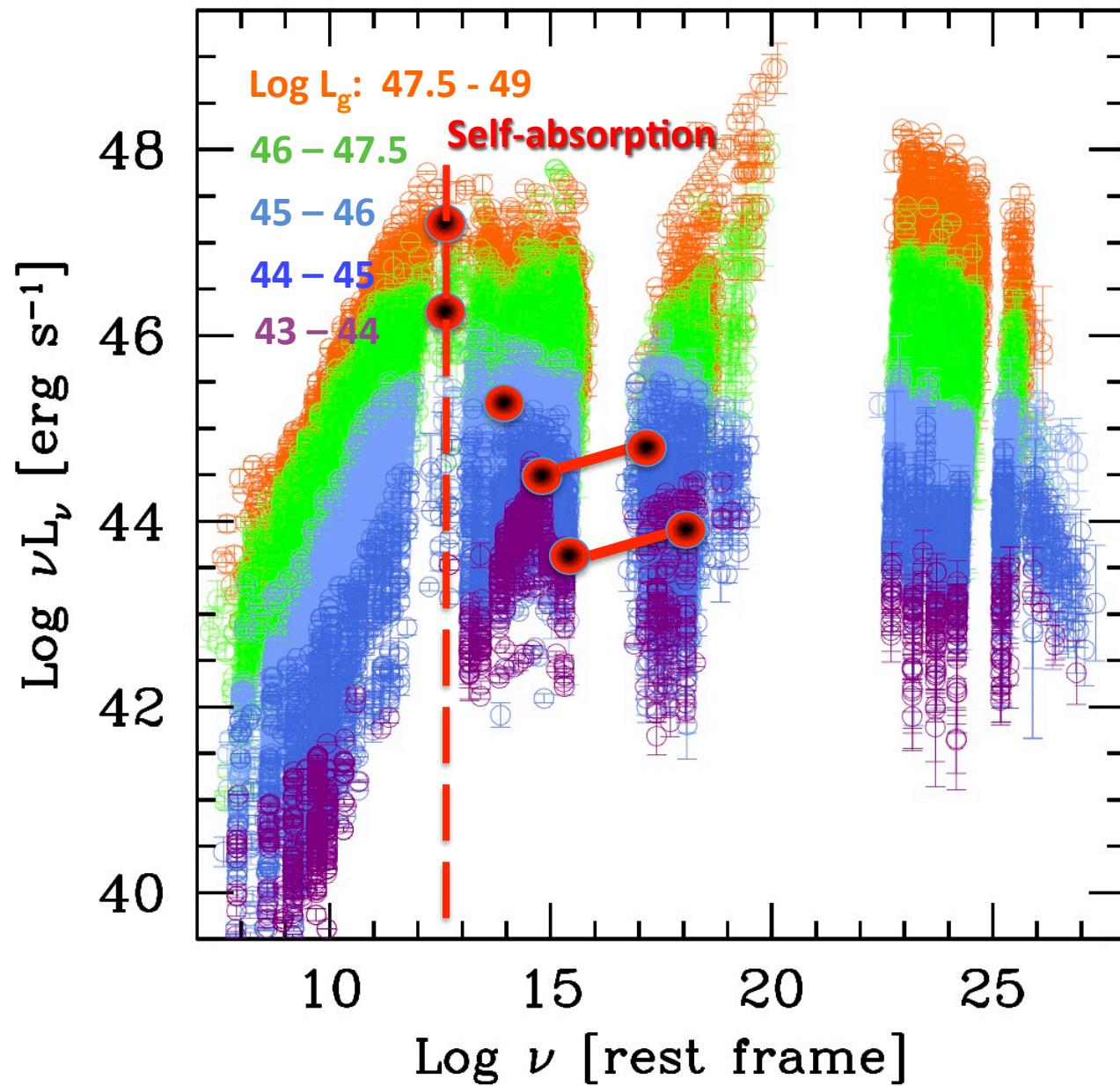


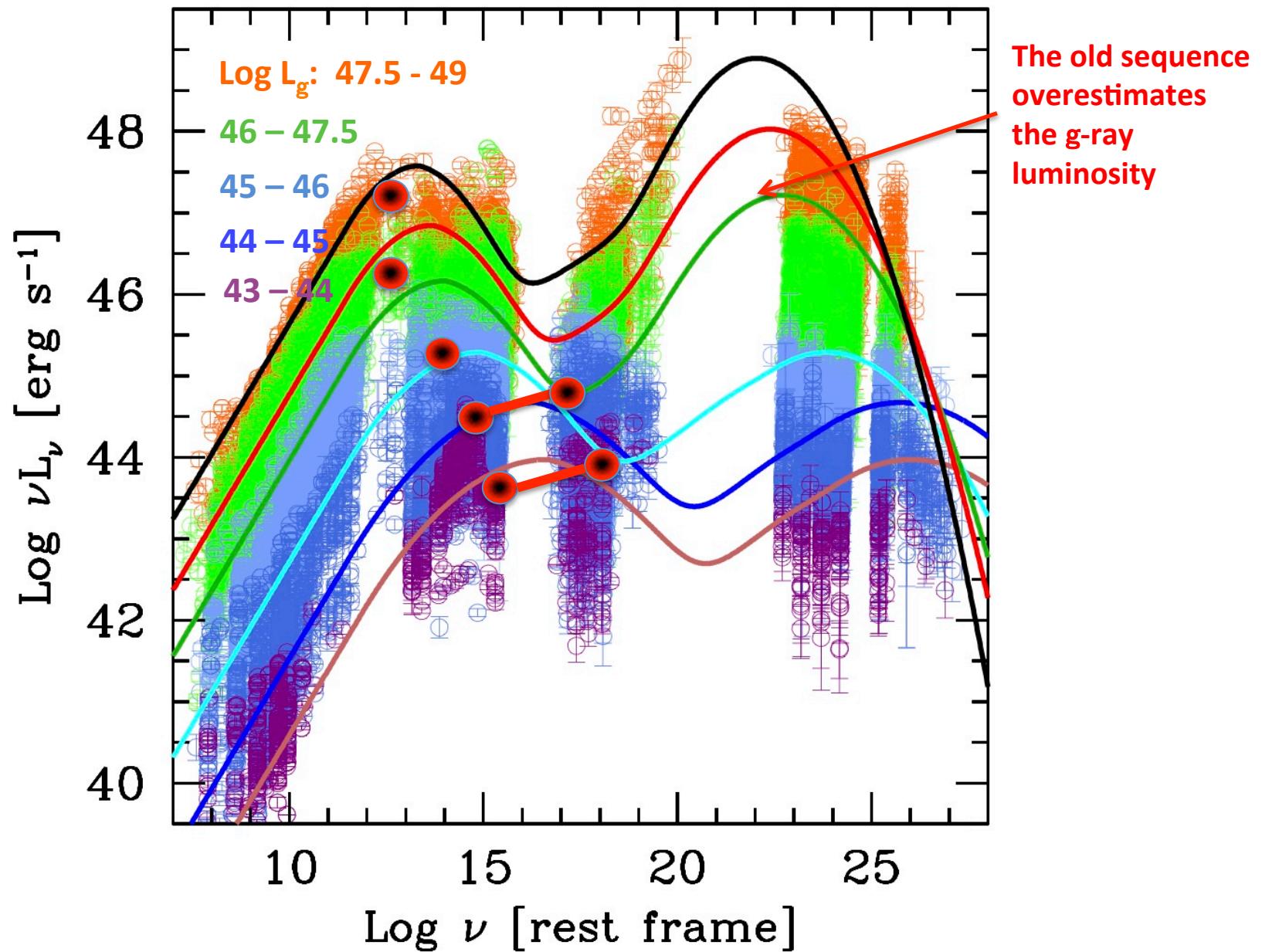
Sbarufatti, Treves & Falomo, 2005

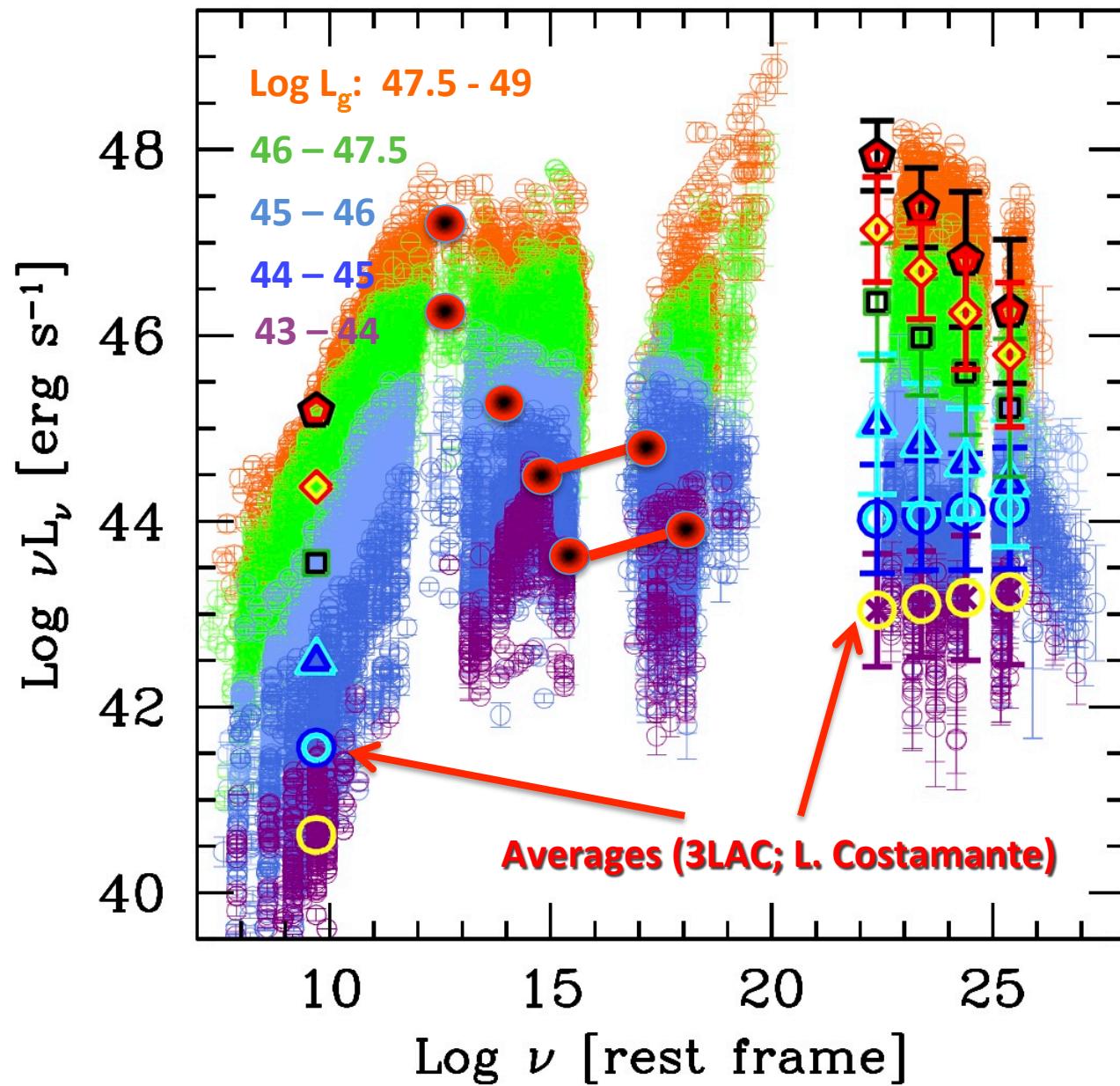
Host galaxies of BL Lacs

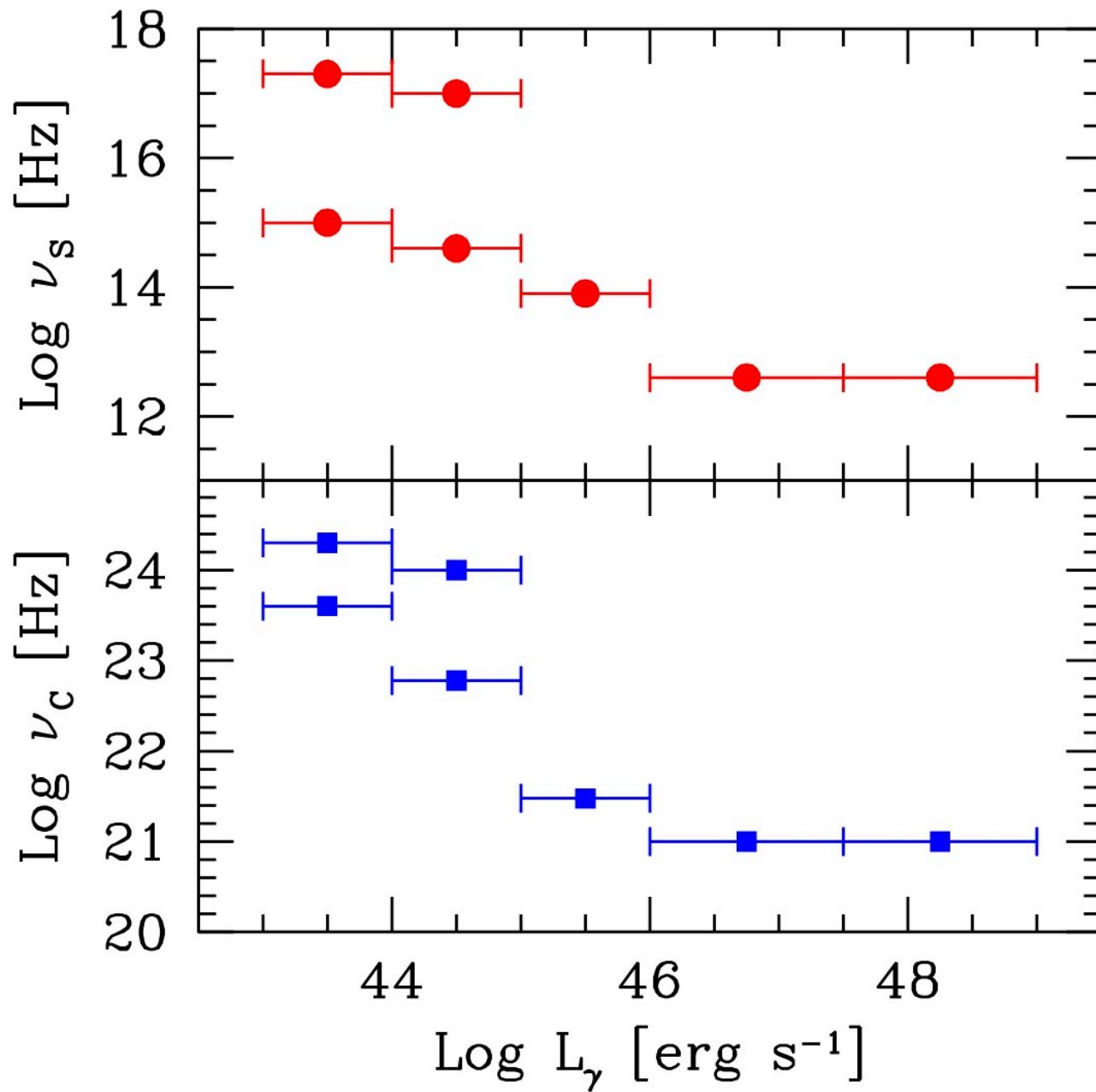


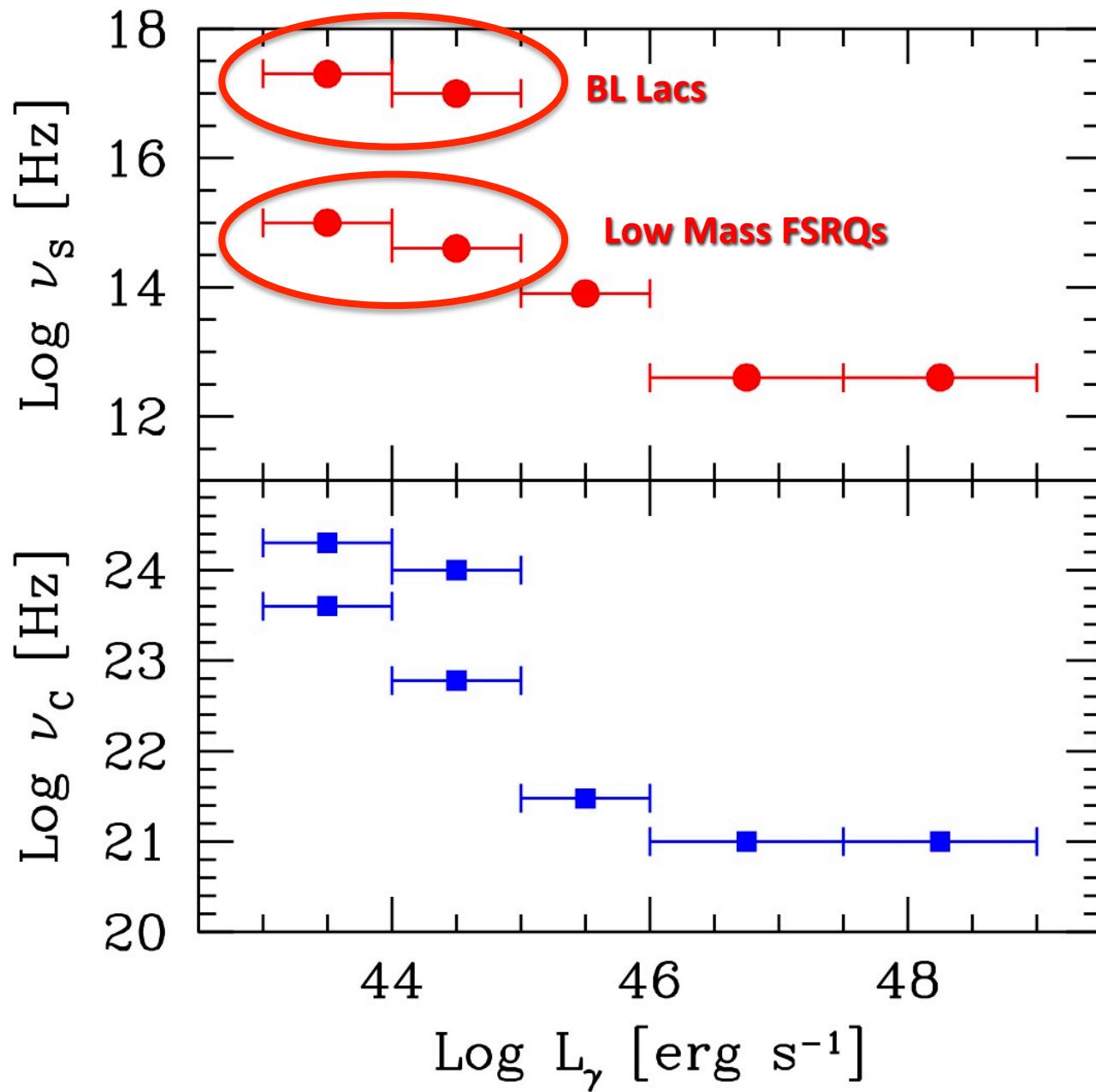


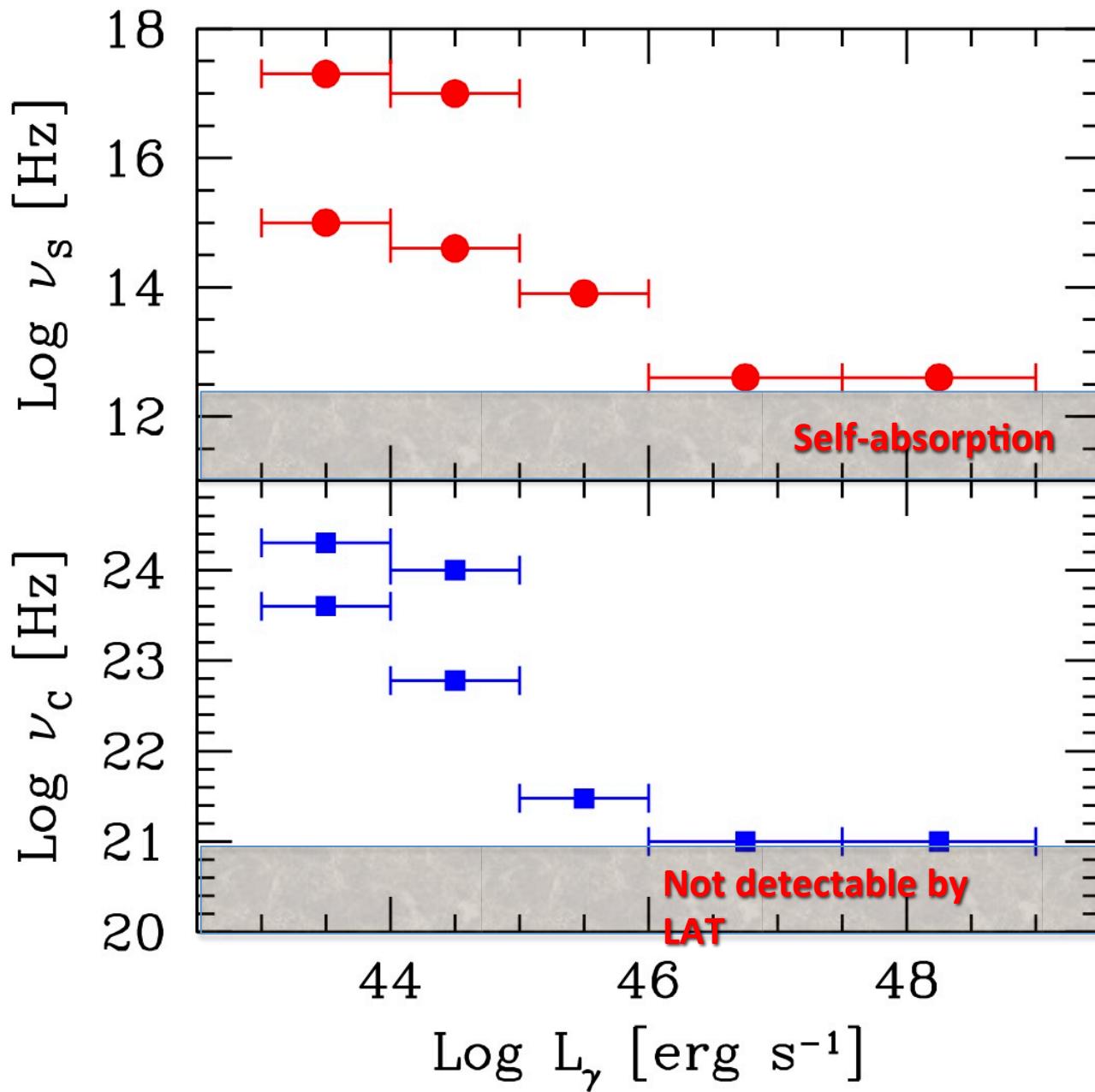


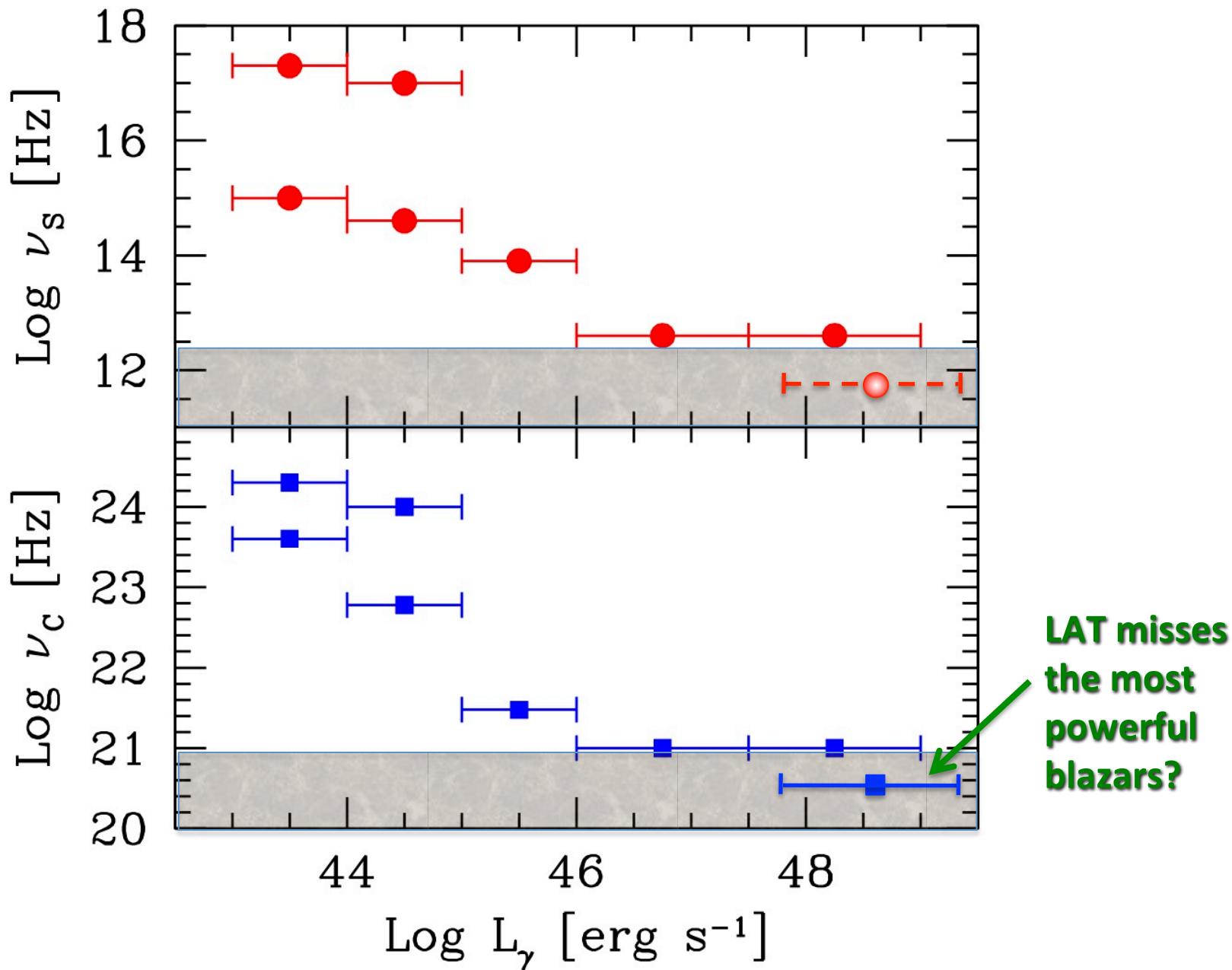


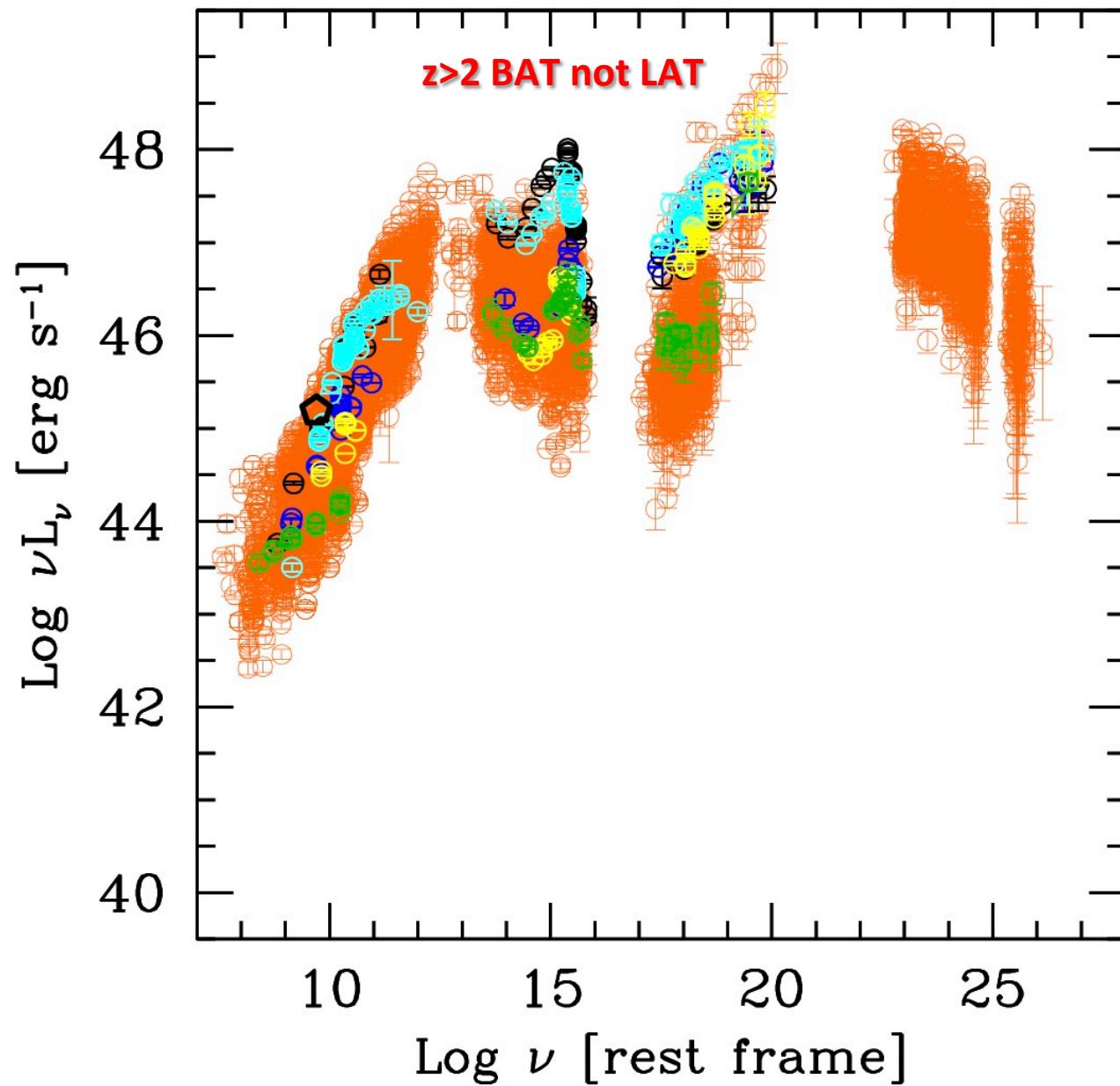


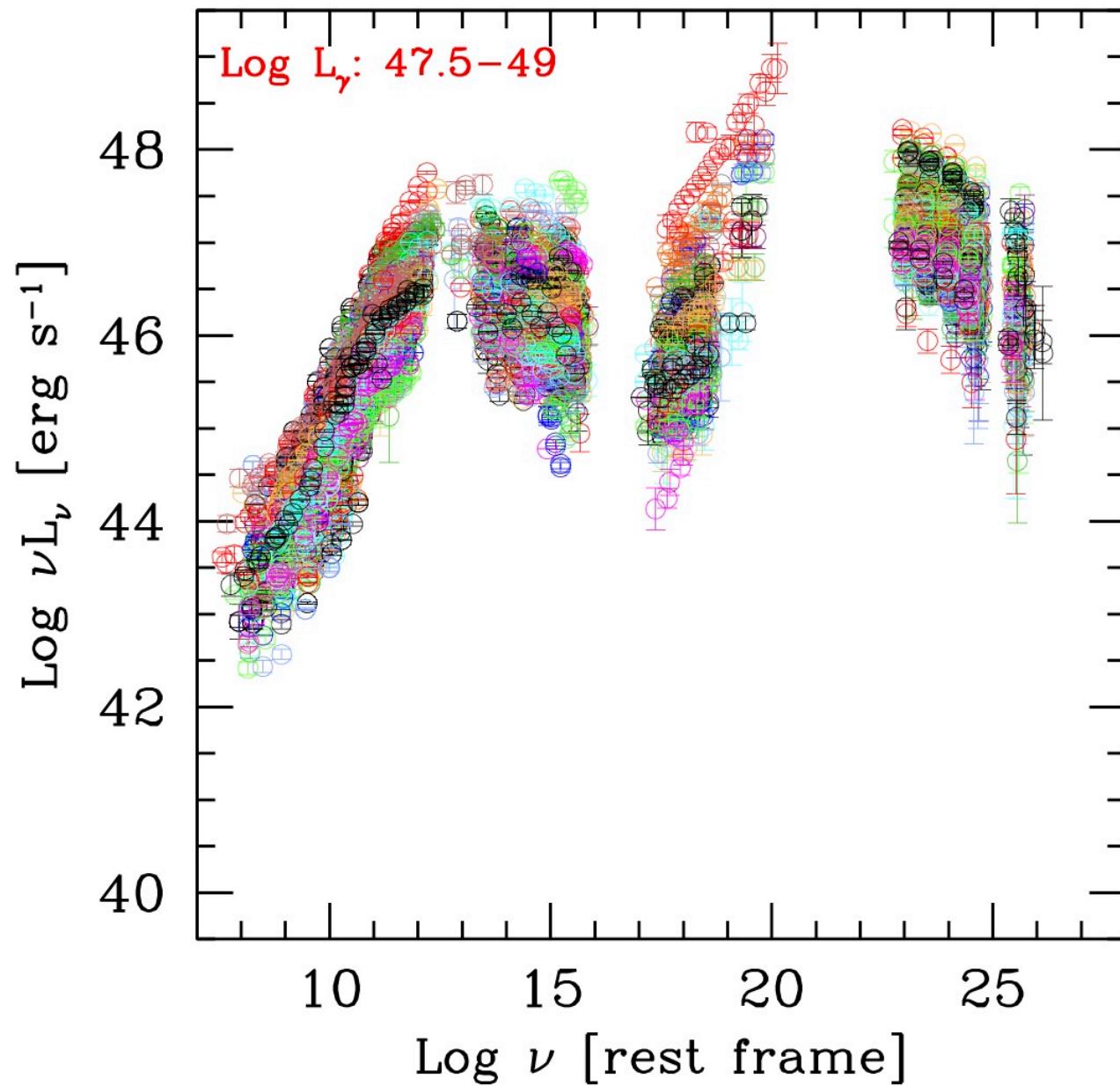


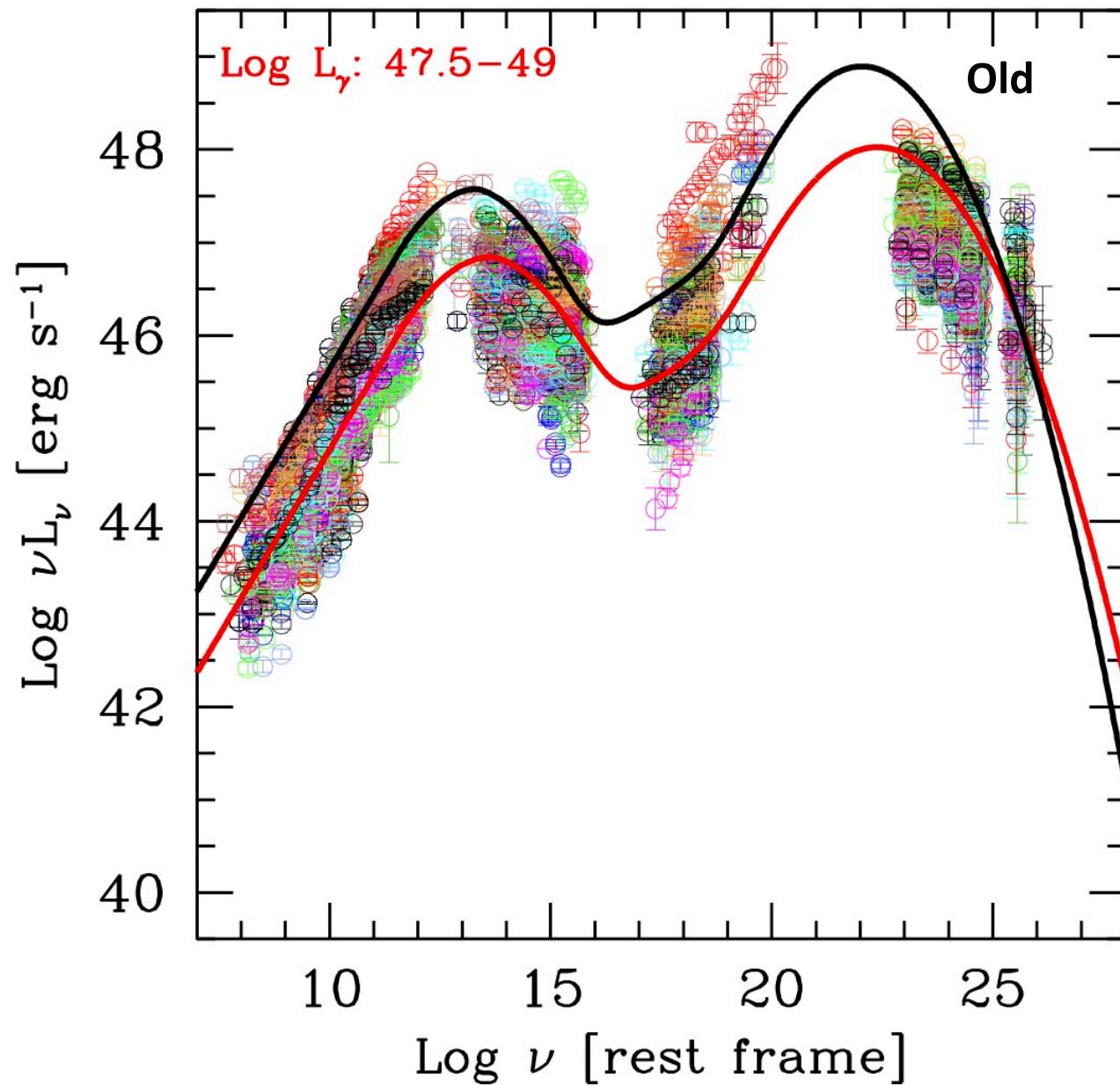


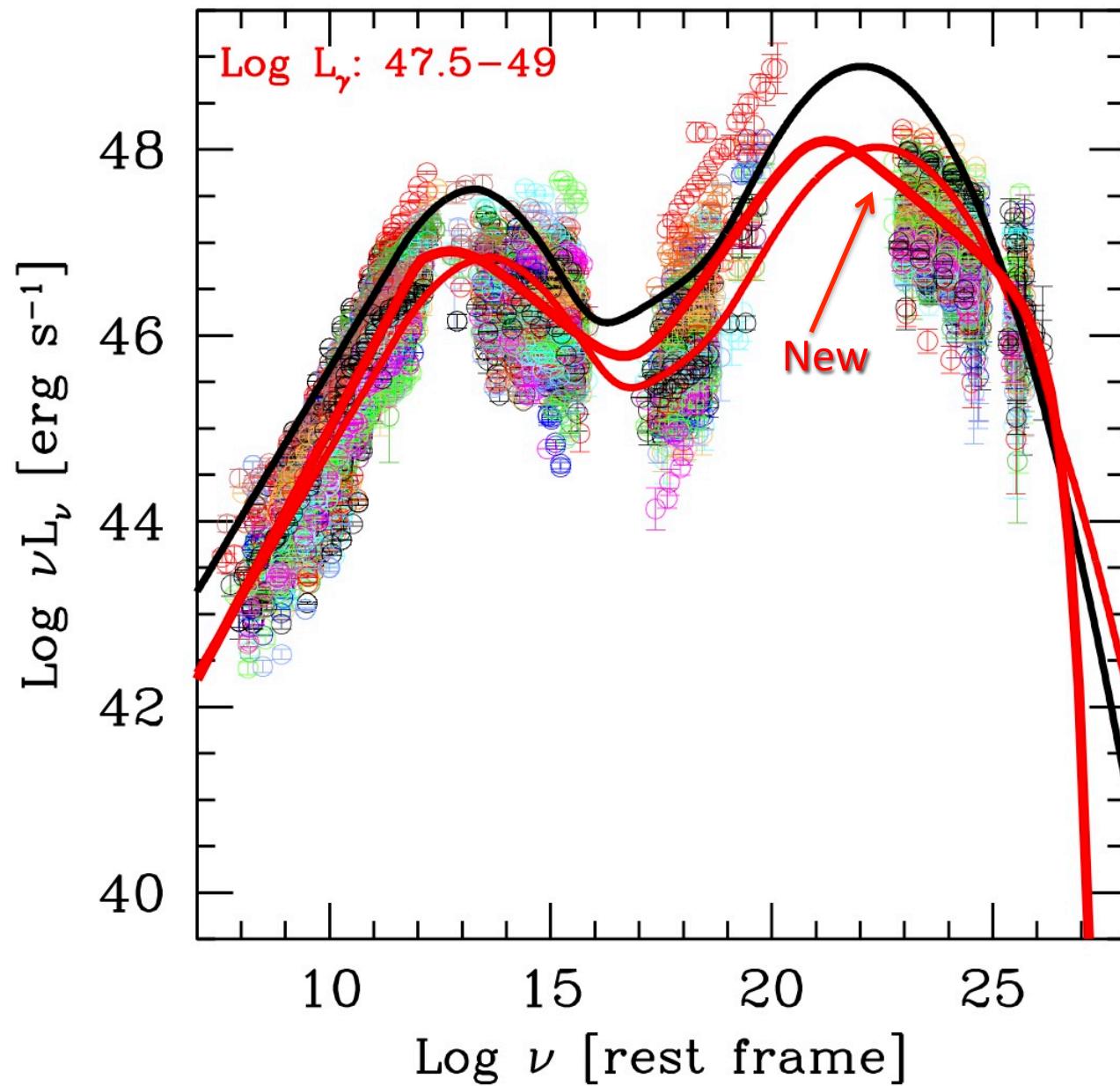


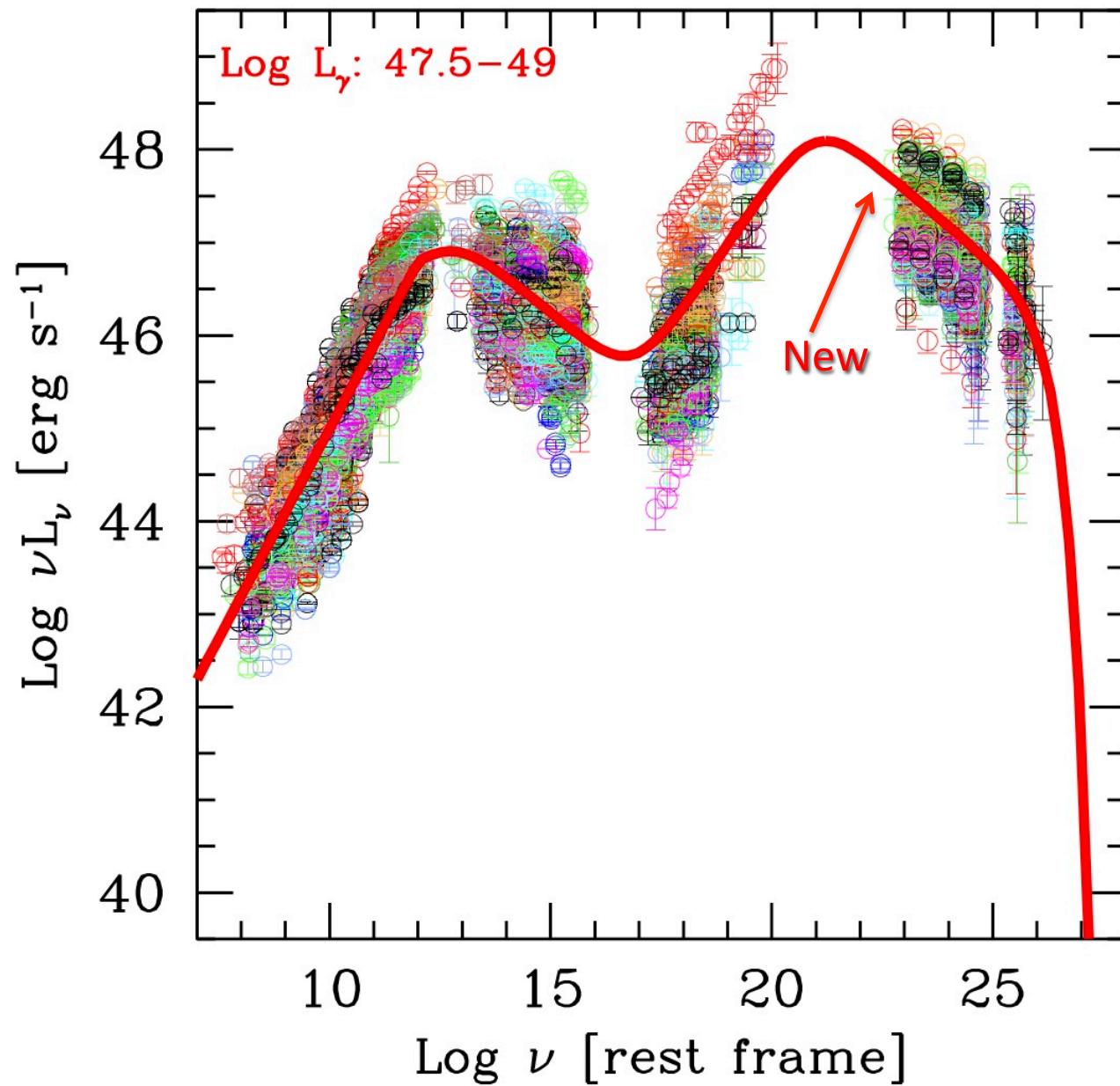


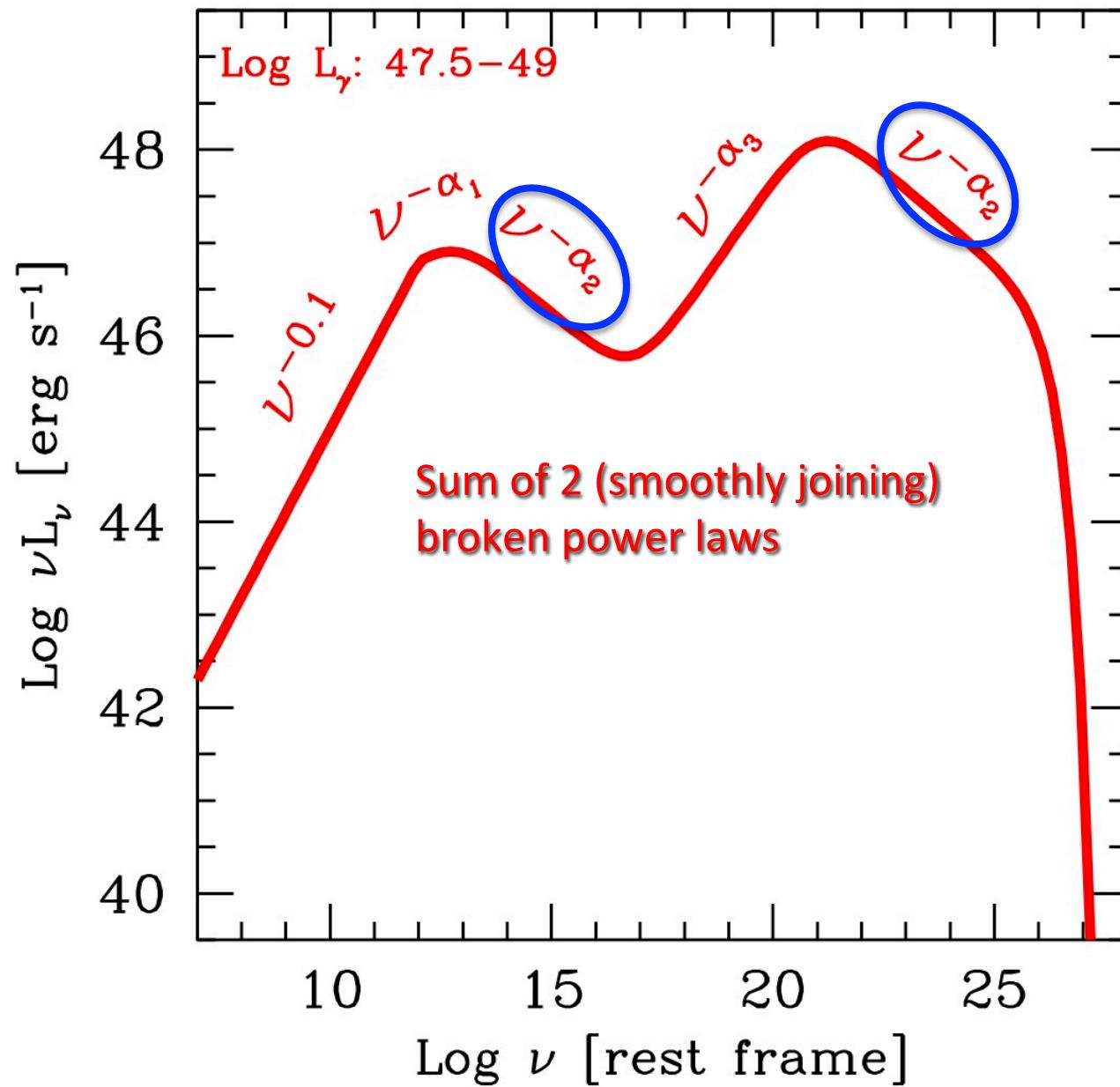


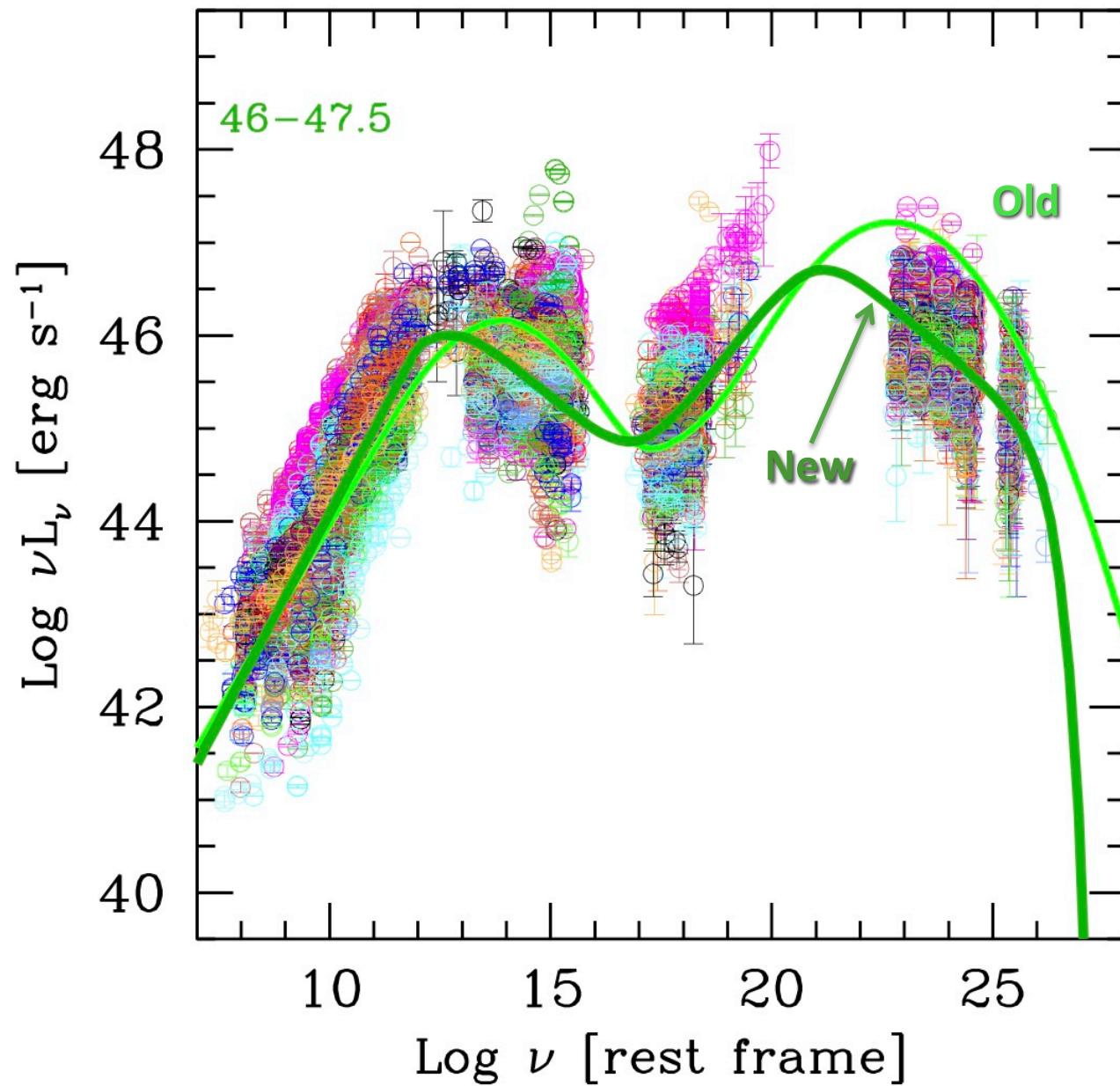


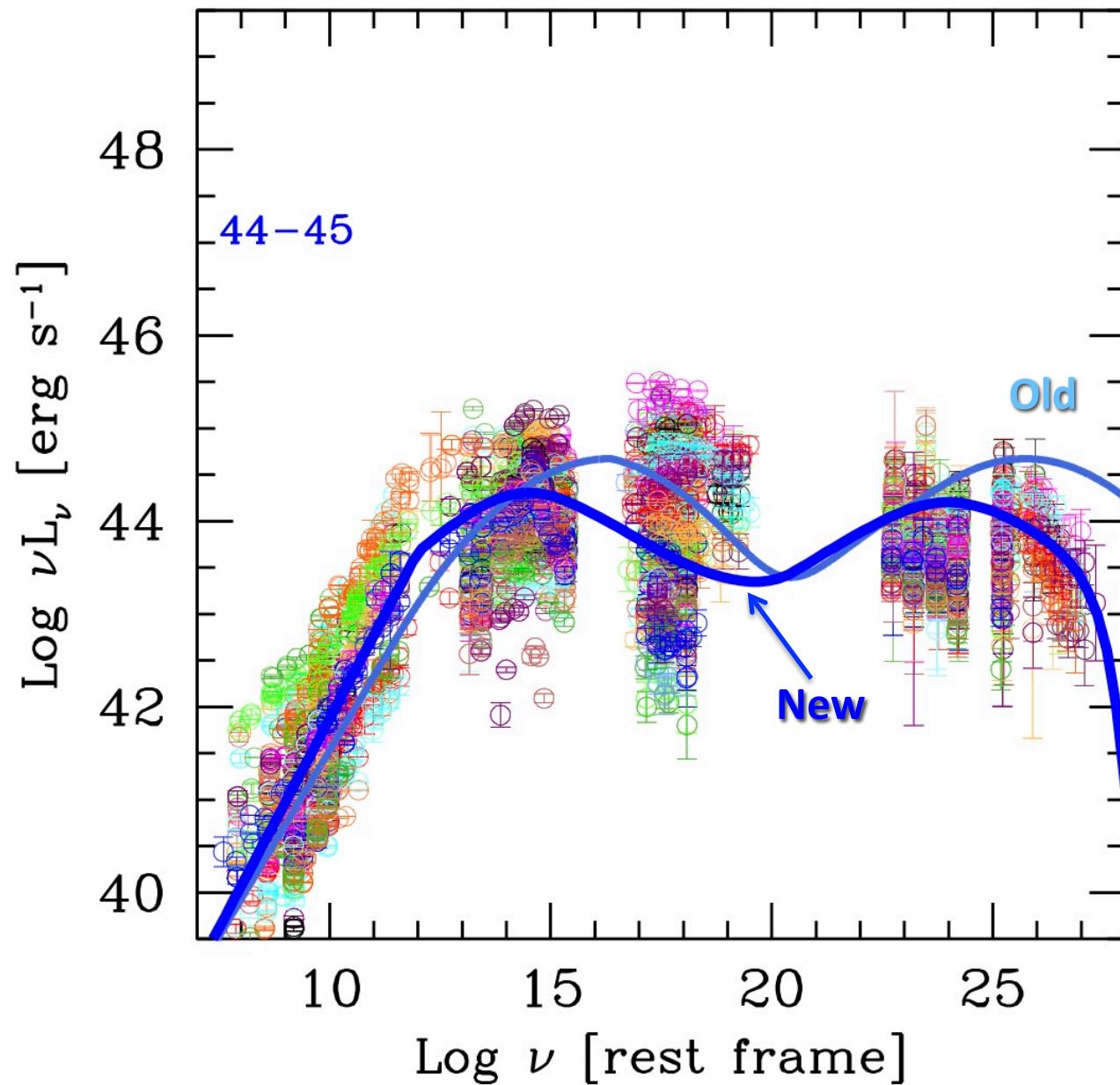


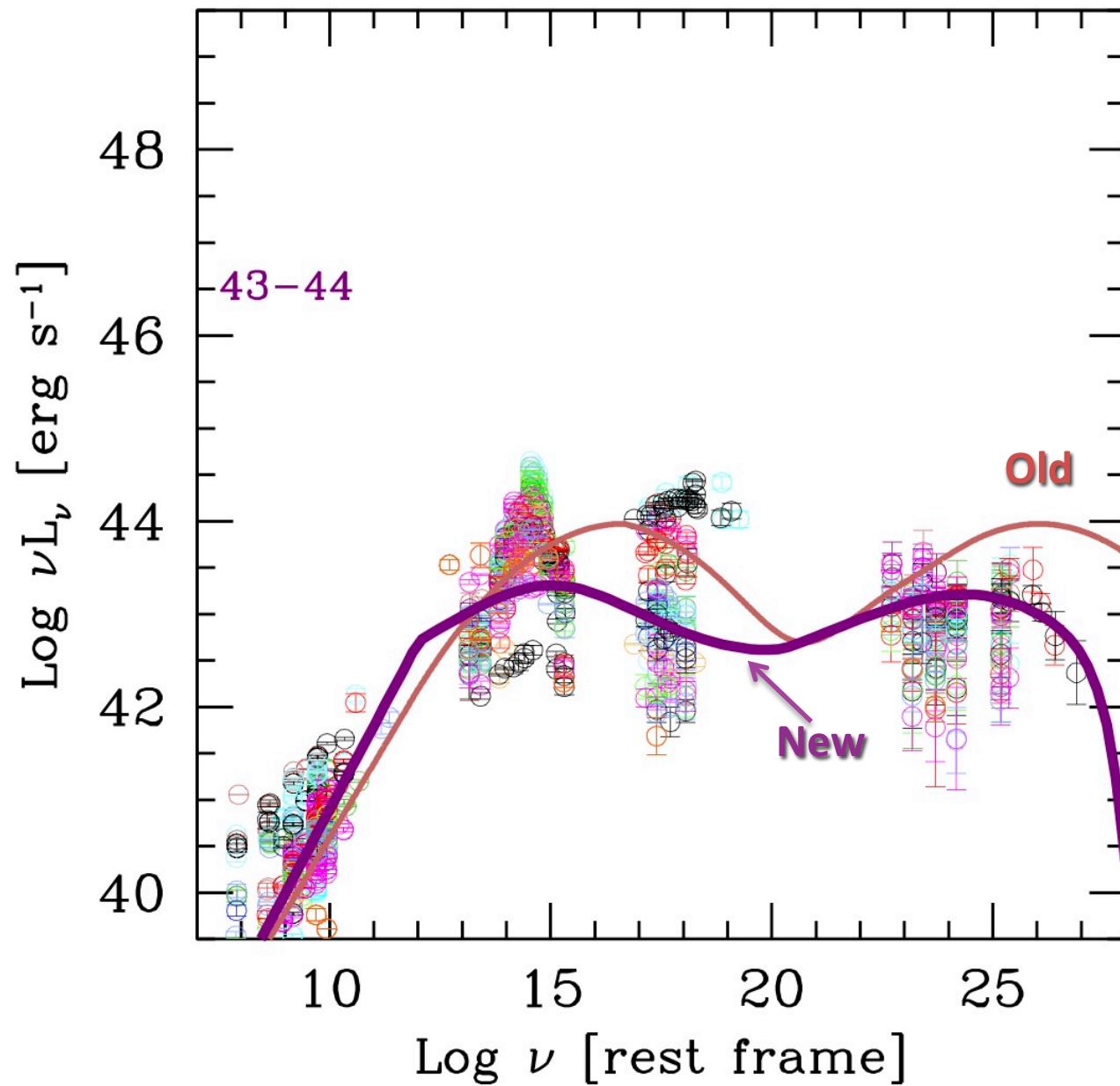




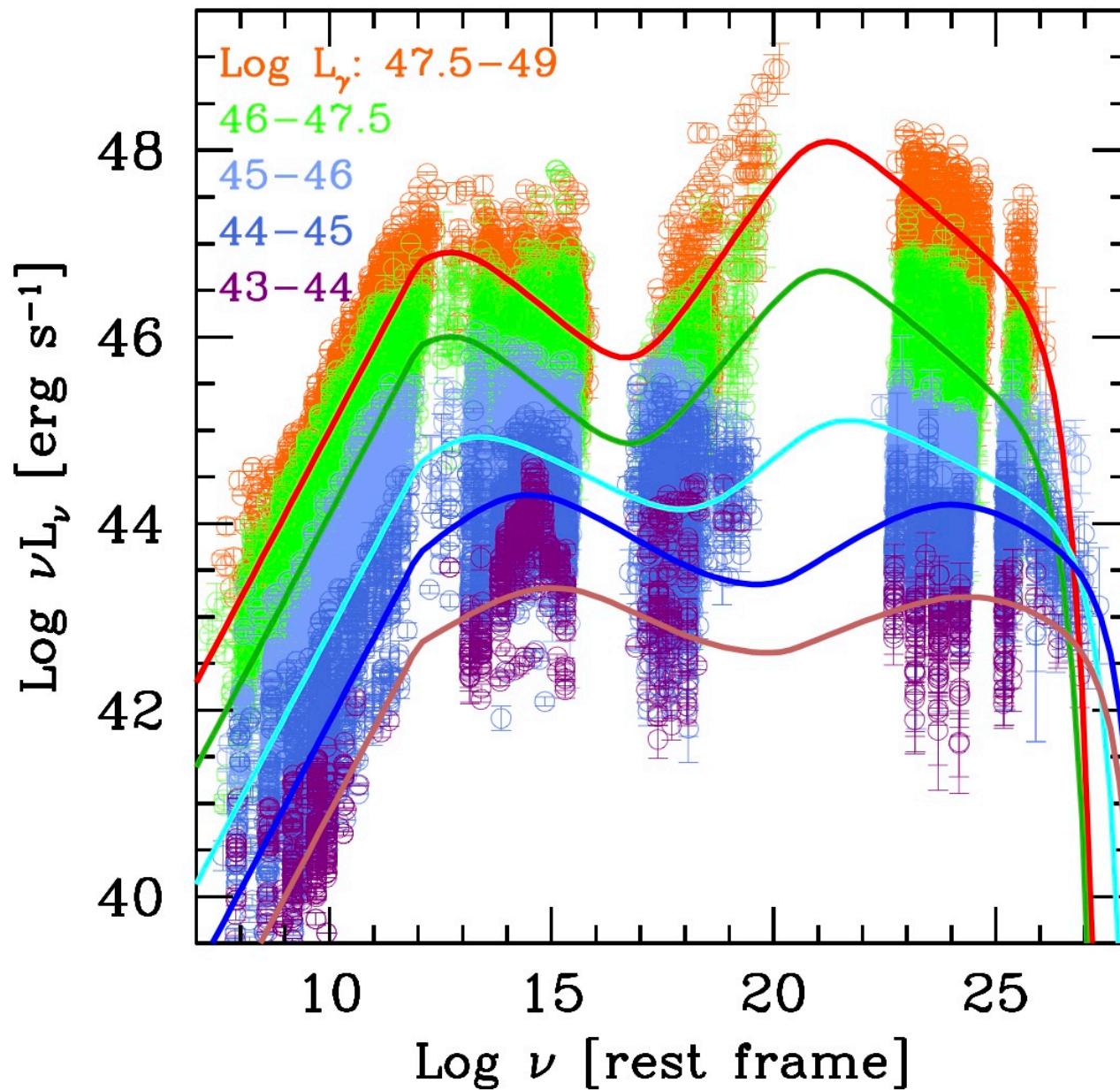




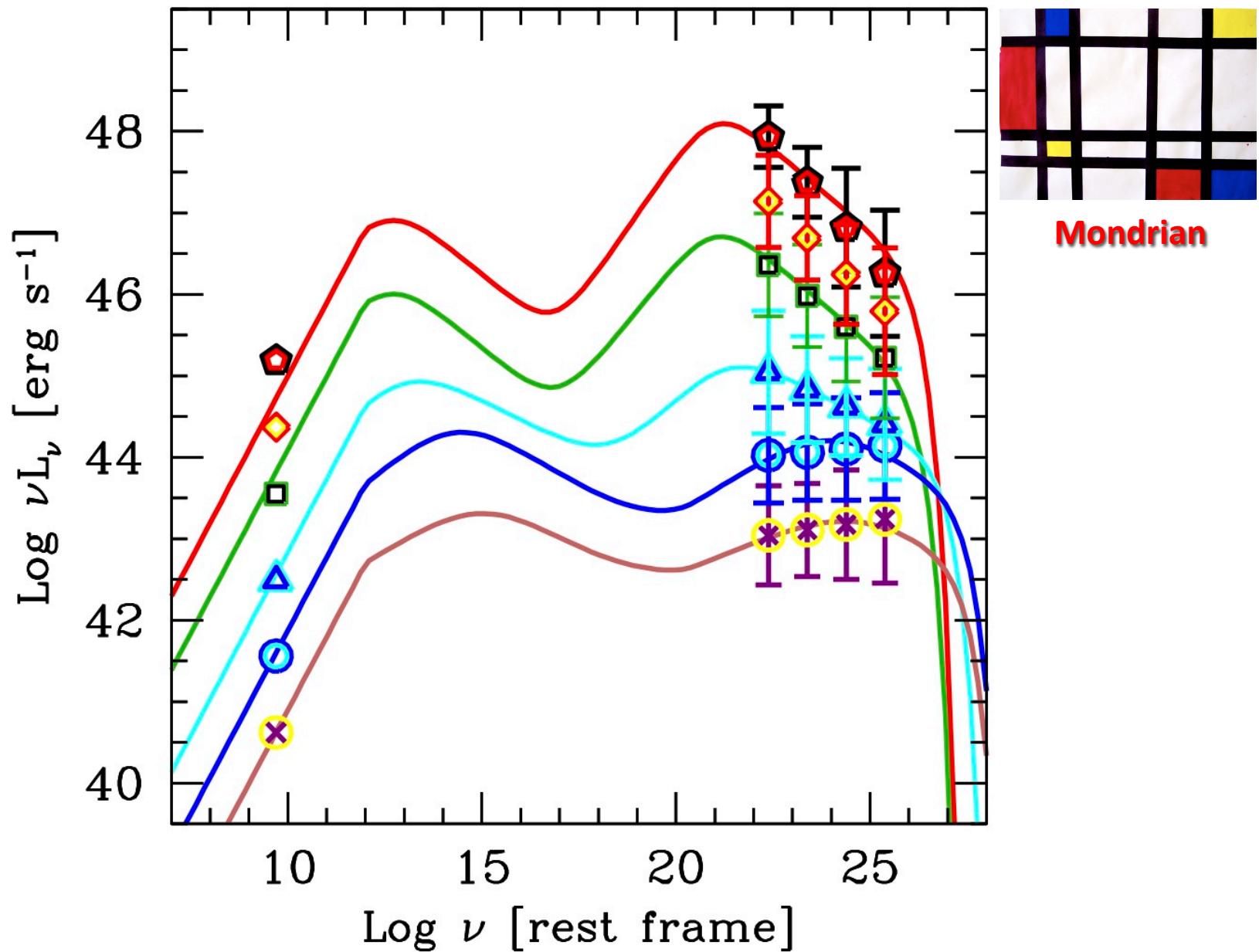




New blazar sequence



New blazar sequence



RELATIVISTIC JETS AND THE CONTINUUM EMISSION IN QSOs

ALAN P. MARSCHER

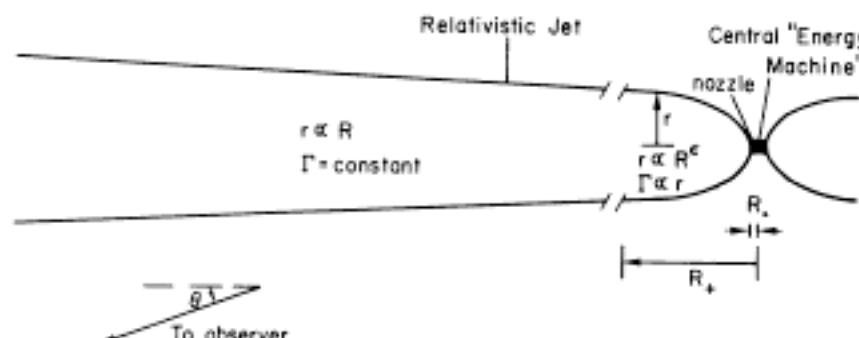
Department of Physics, University of California, San Diego

Received 1979 April 6; accepted 1979 July 30

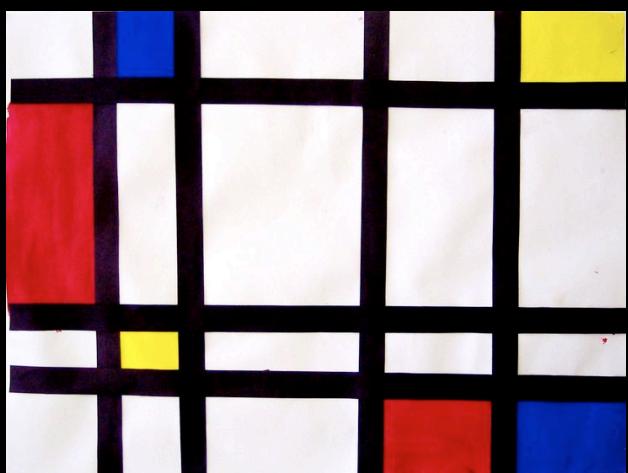
ABSTRACT

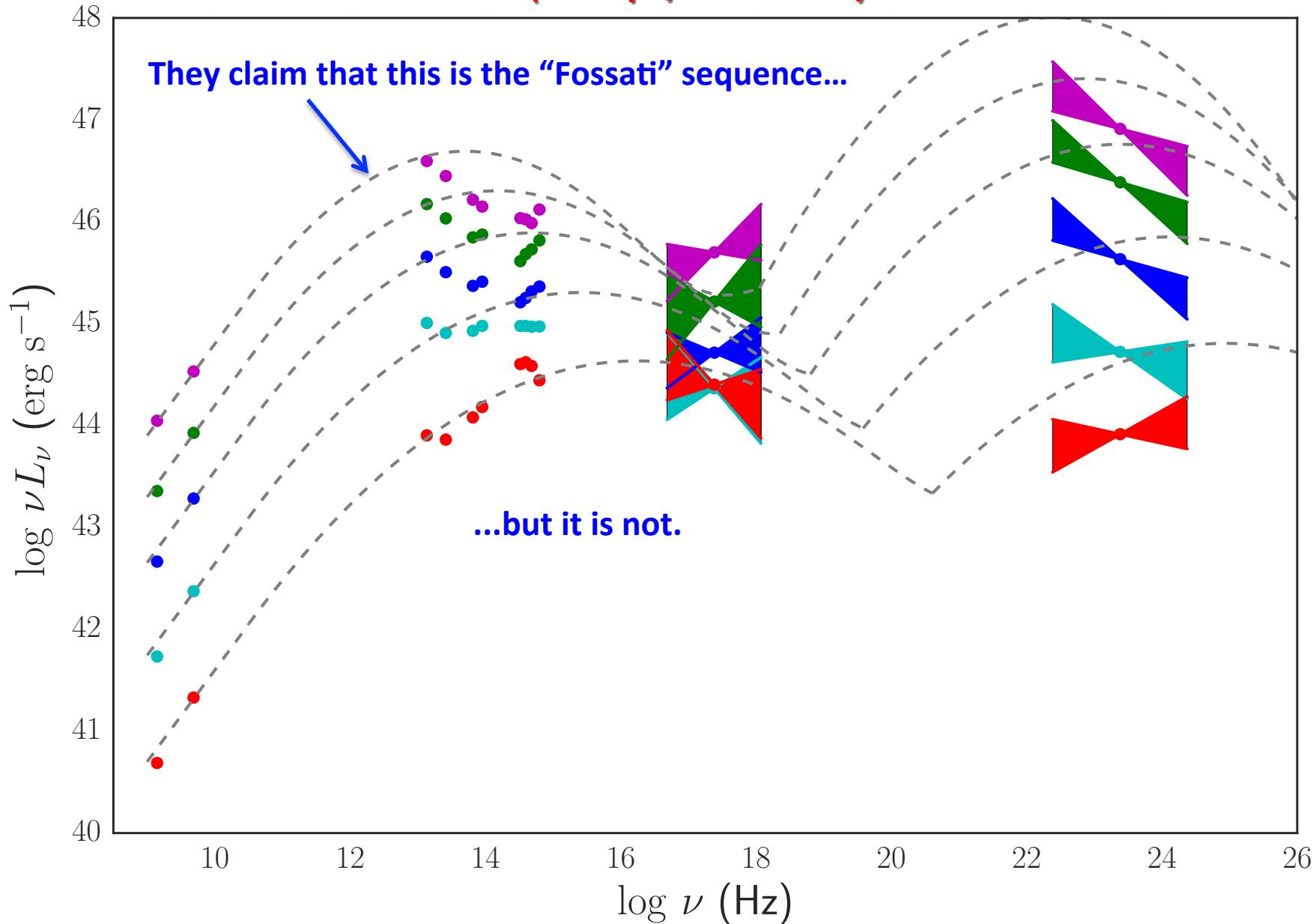
The radio through optical, and possibly X-ray, emission of QSOs and active galactic nuclei is interpreted in terms of a relativistic jet containing high-energy particles and magnetic field. An observer whose line of sight is nearly parallel to the jet axis detects a strong, compact radio source whose flux density smoothly connects with an optical spectrum which is much steeper than that emitted in the rest frame of the jet flow. The radiation is strongly polarized, and this type of source is identified with the optically violent variables. Larger viewing angles relative to the jet axis result in spectral dominance by the central region containing the "energy machine" which drives the energy flux in the jet. This radiation is weakly polarized, has a flatter spectrum and low degree of variability, and is associated with much weaker radio sources. These results are found to be consistent with presently available observational data and future observational tests are suggested. For example, the source size, as inferred from variability time scales, must increase with wavelength in the optical-infrared portion of the spectrum.

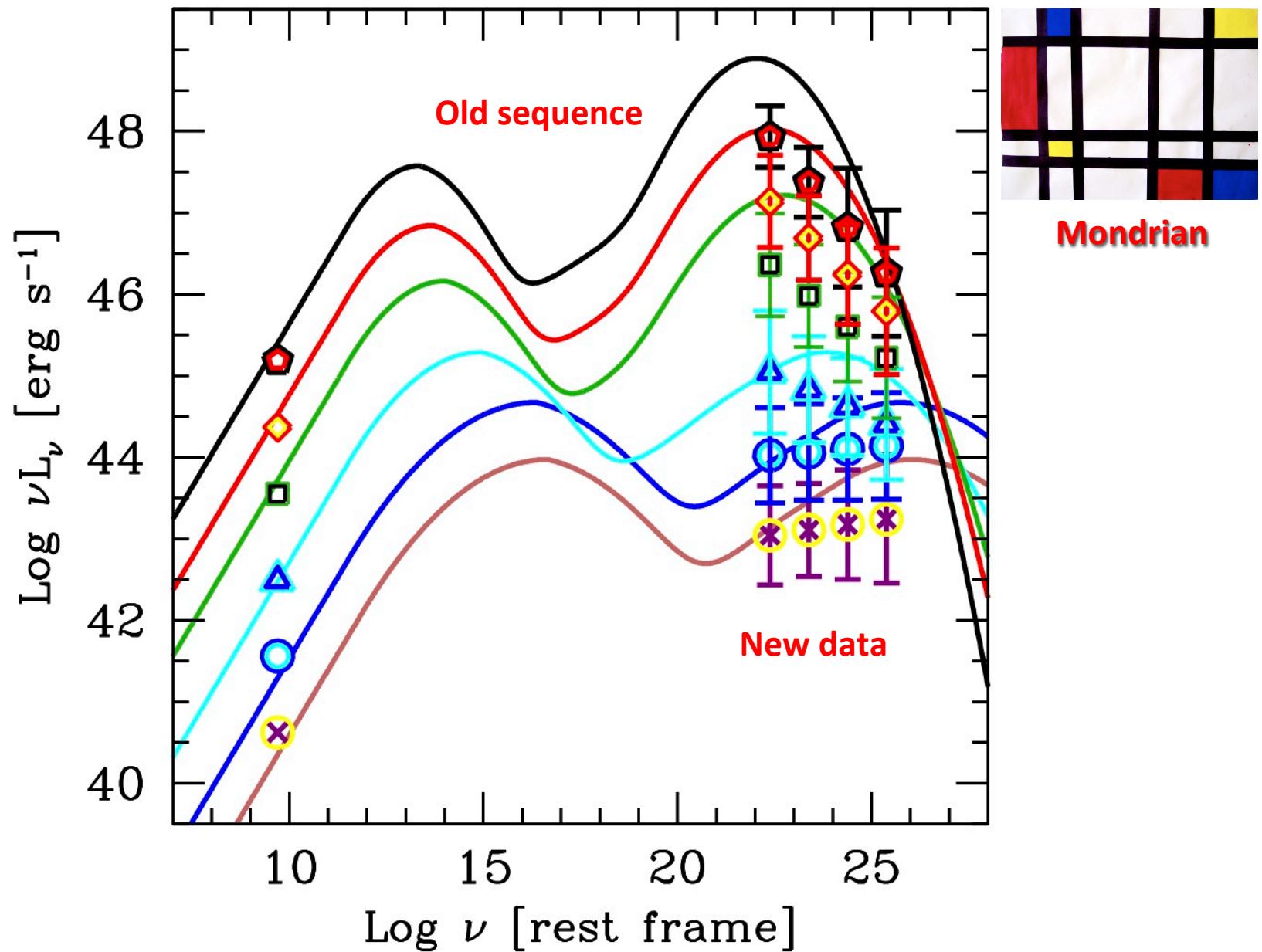
Subject headings: BL Lacertae objects — quasars — X-rays: sources

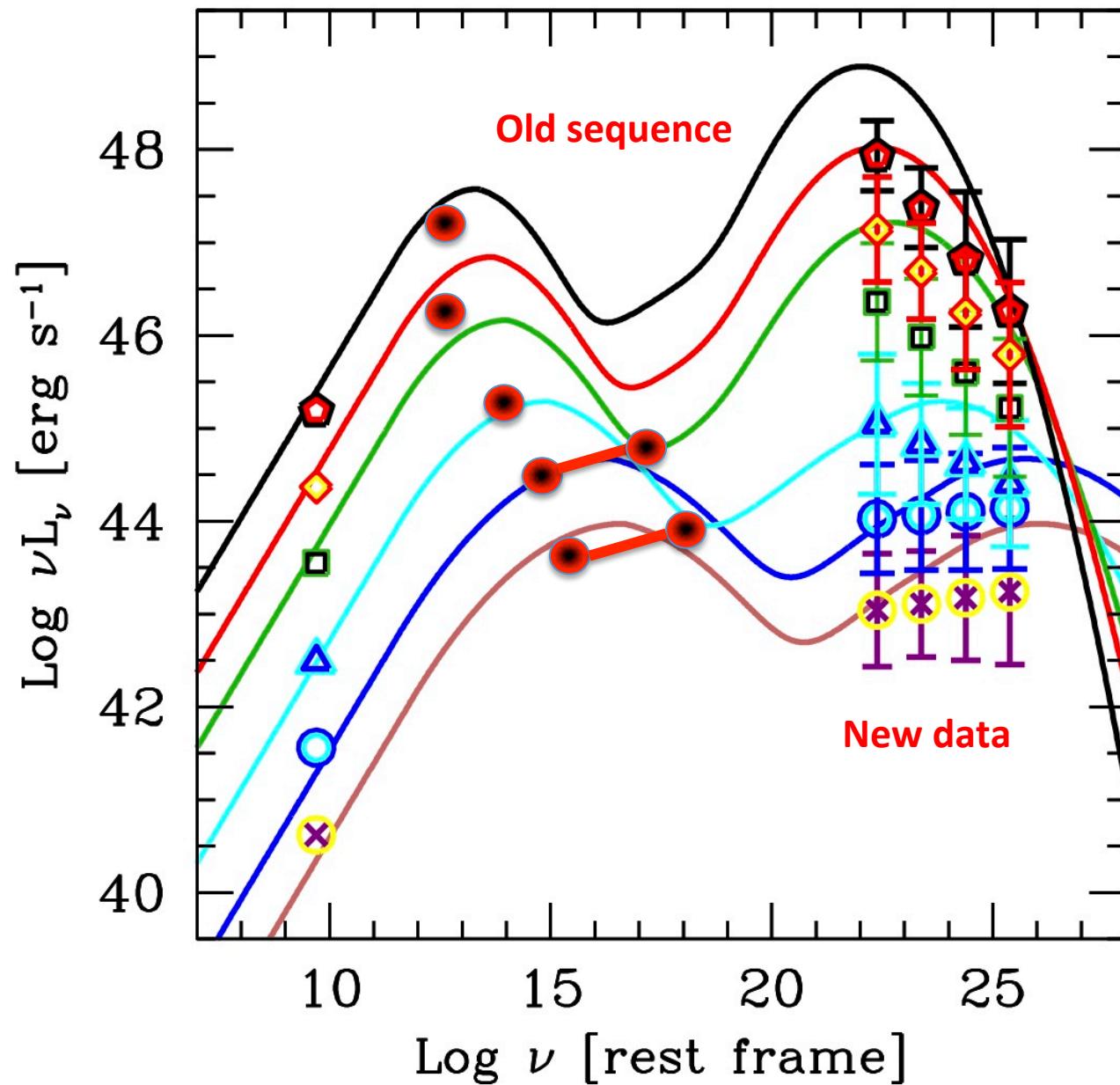


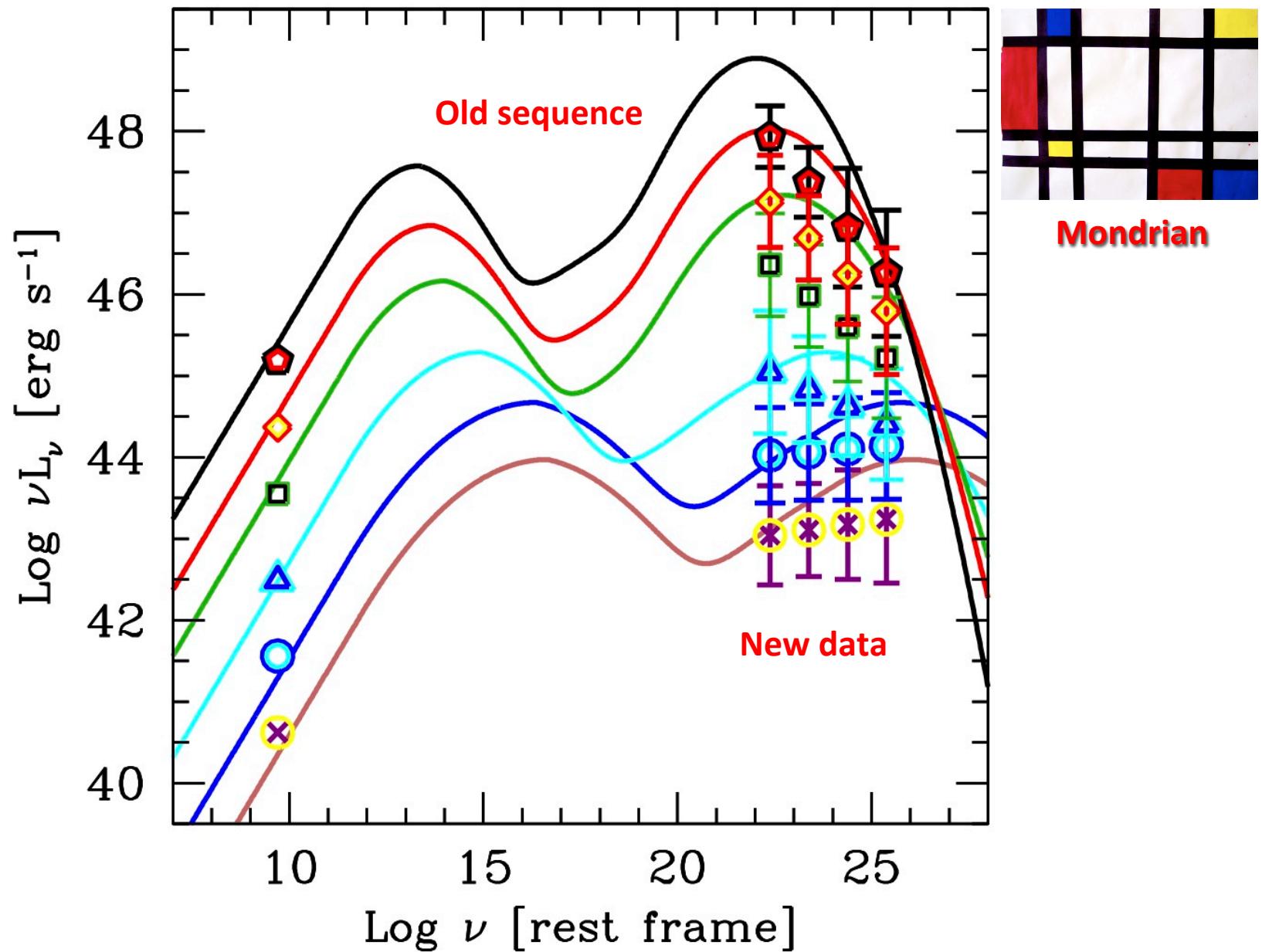
1.—Schematic representation (not to scale; in particular note the change in scale at $R \sim R_+$) of a source containing two oppositely directed relativistic jets. After Blandford and Rees (1974, 1978).











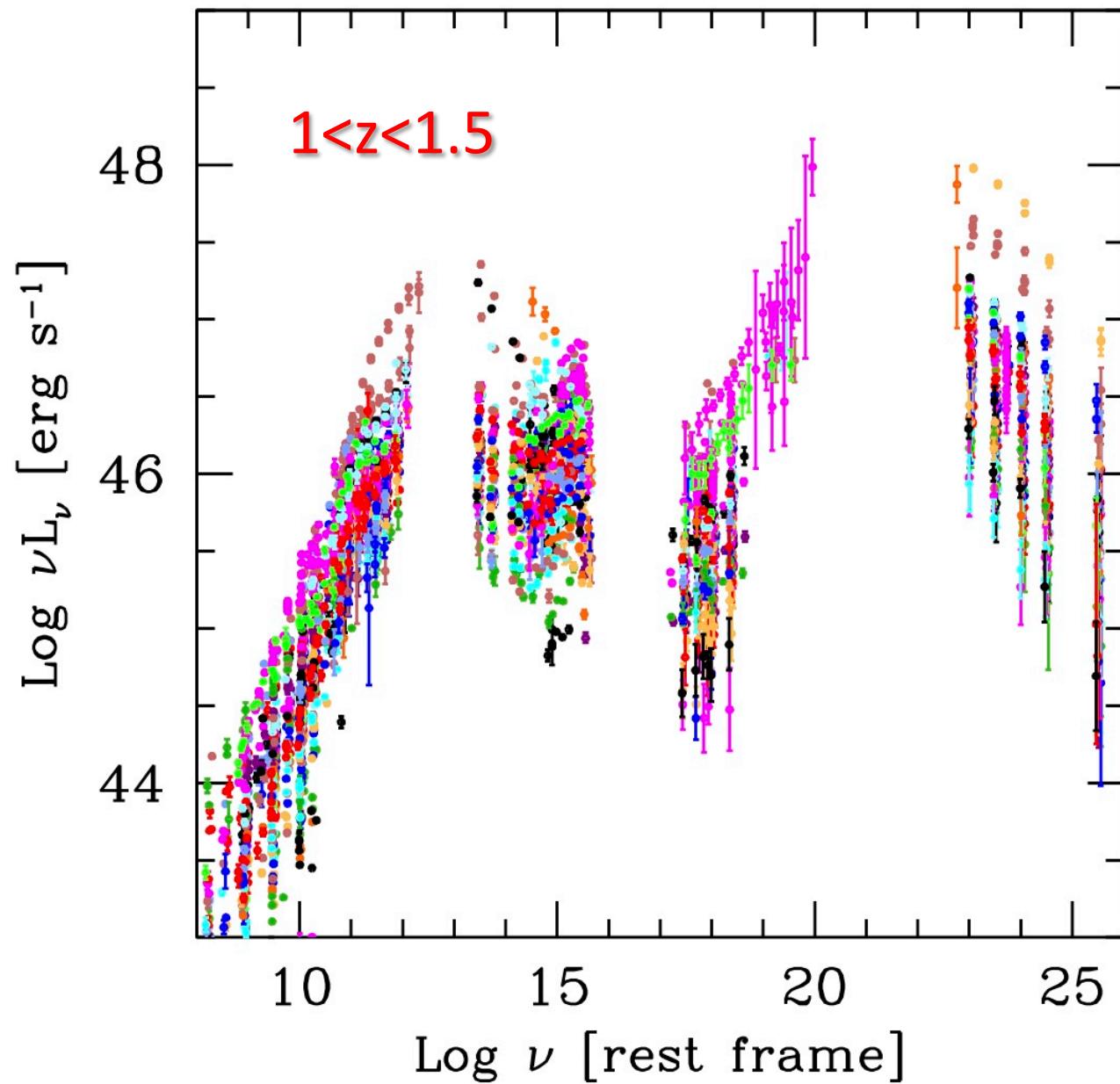
Log L_g: 47.5 - 49

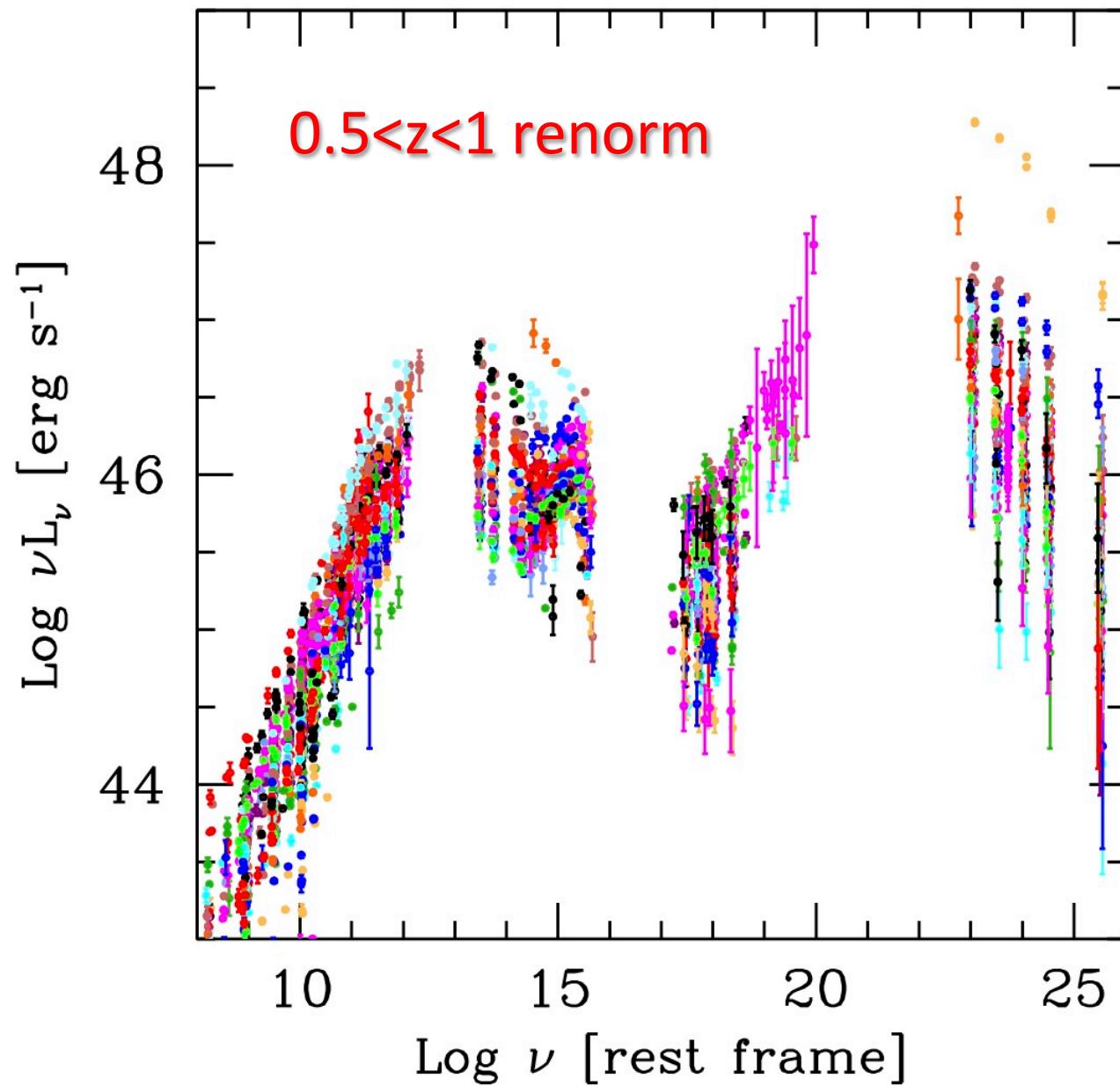
46 – 47.5

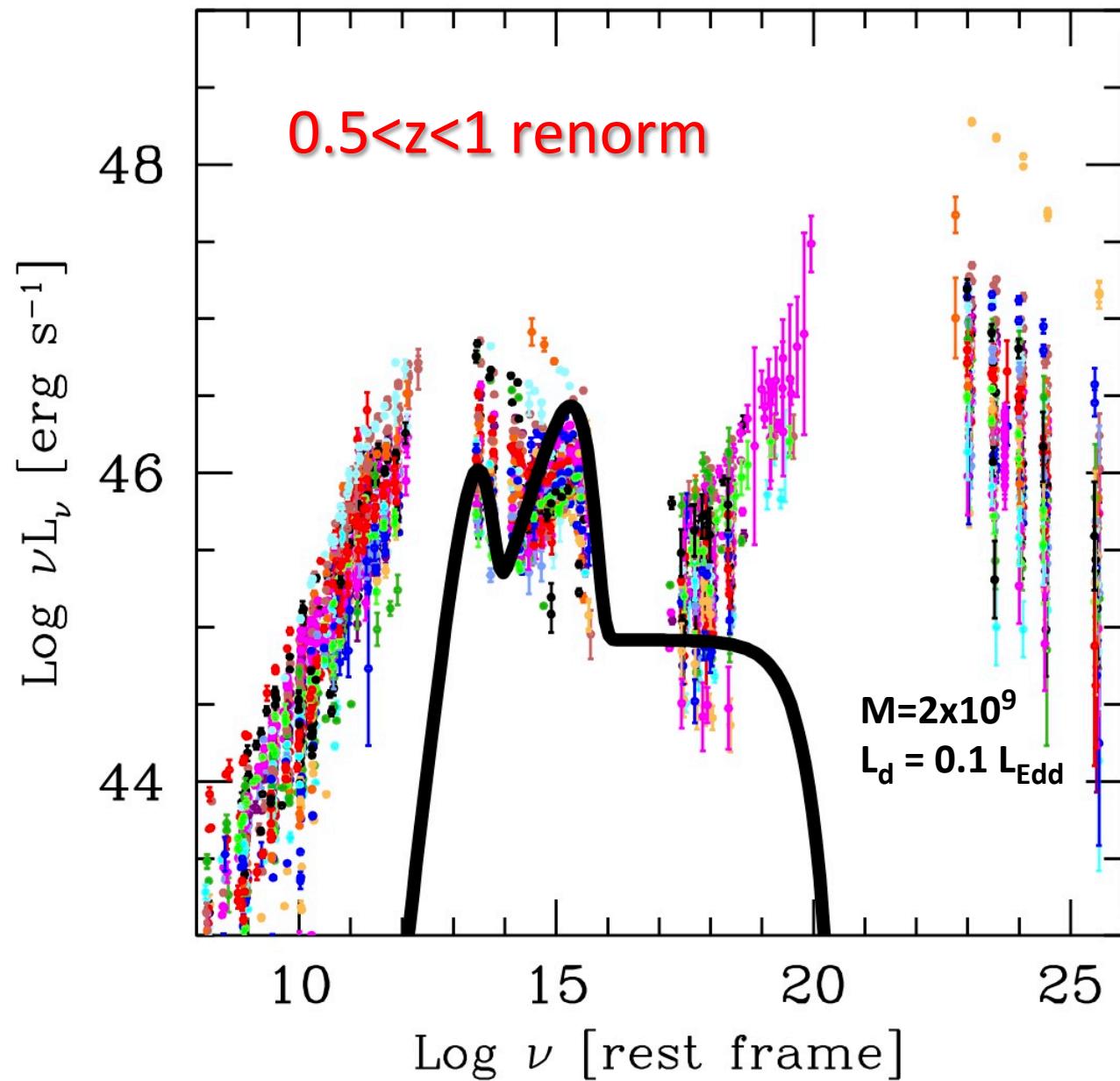
45 – 46

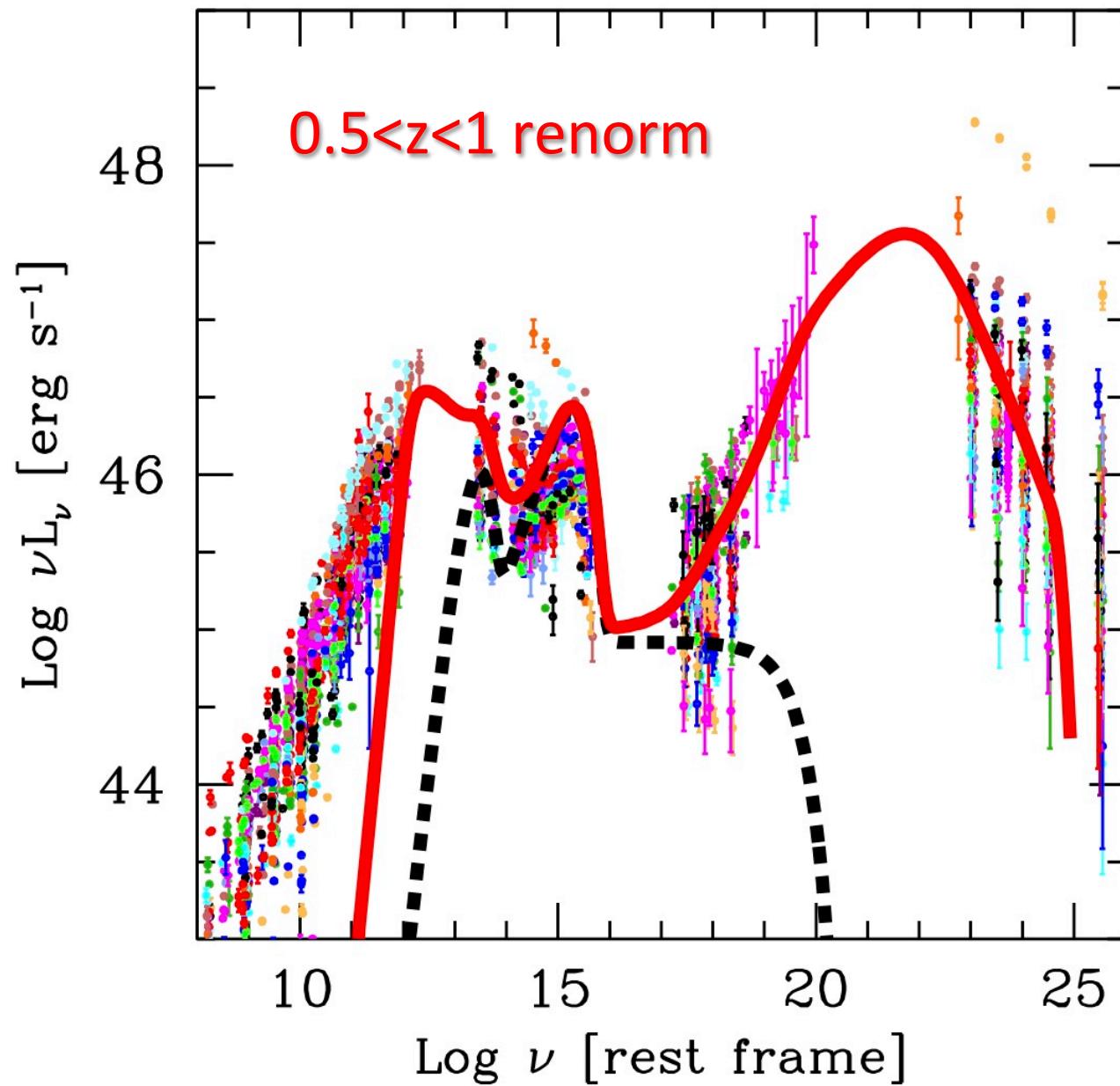
44 – 45

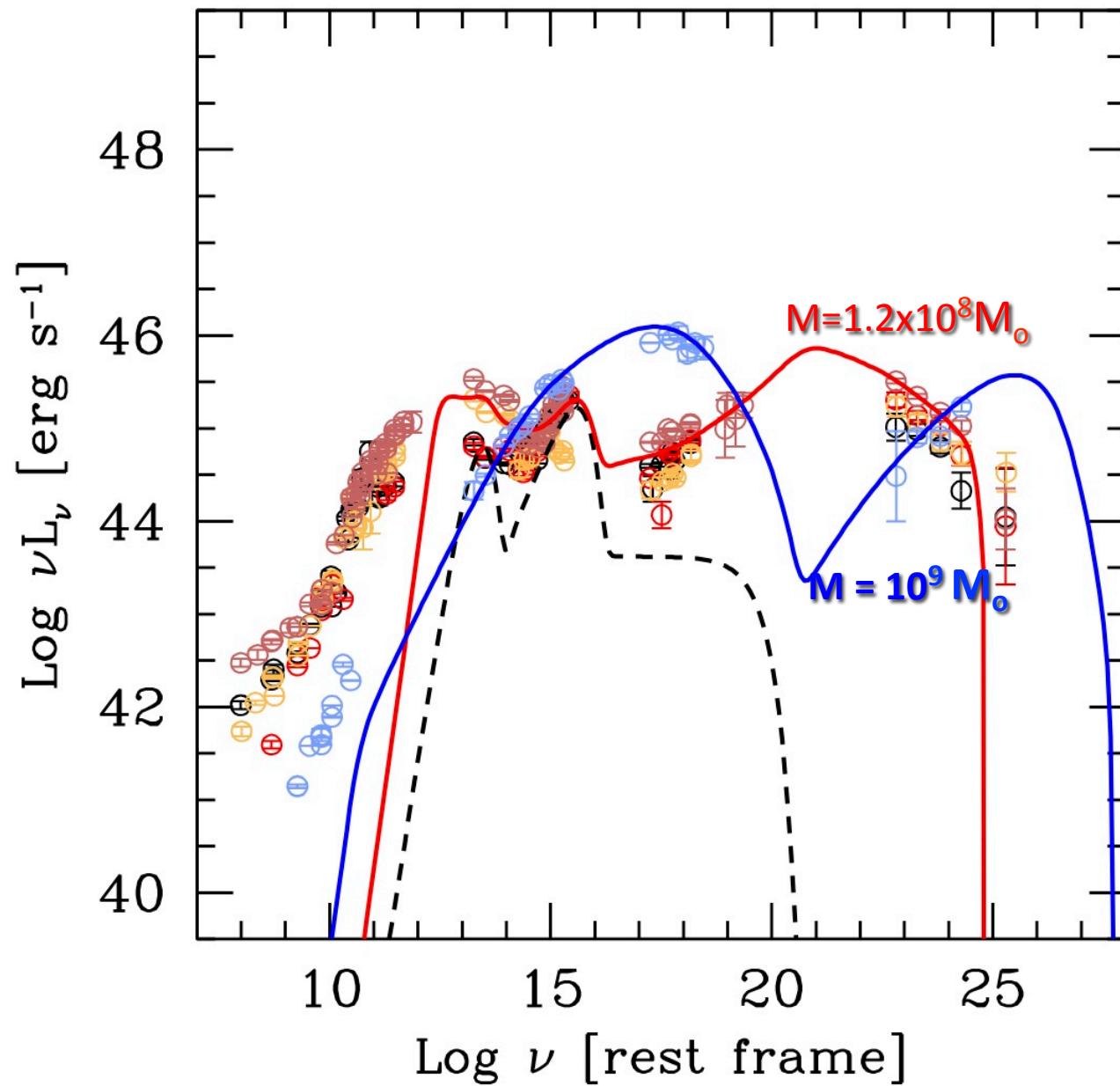
43 – 44

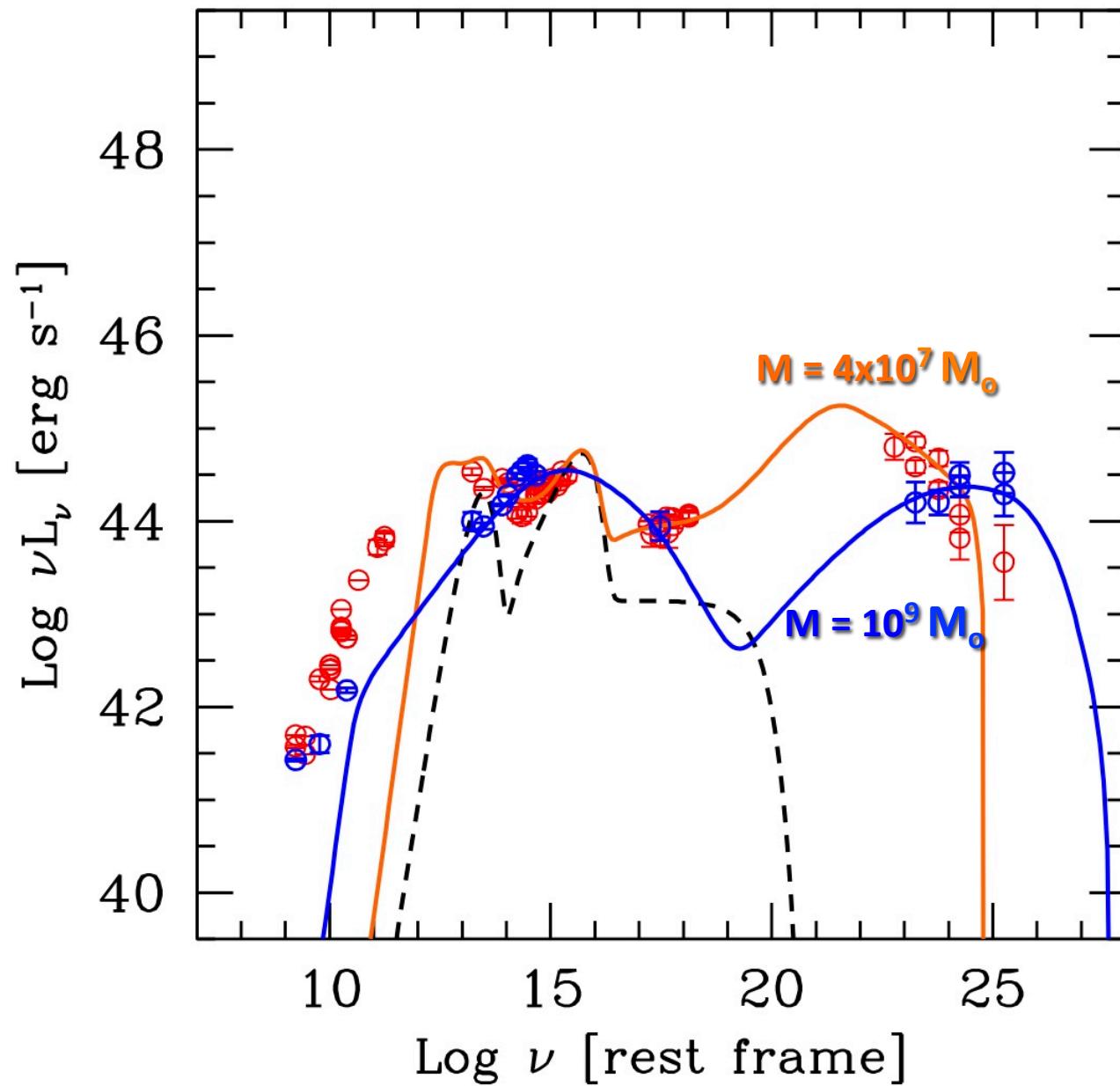


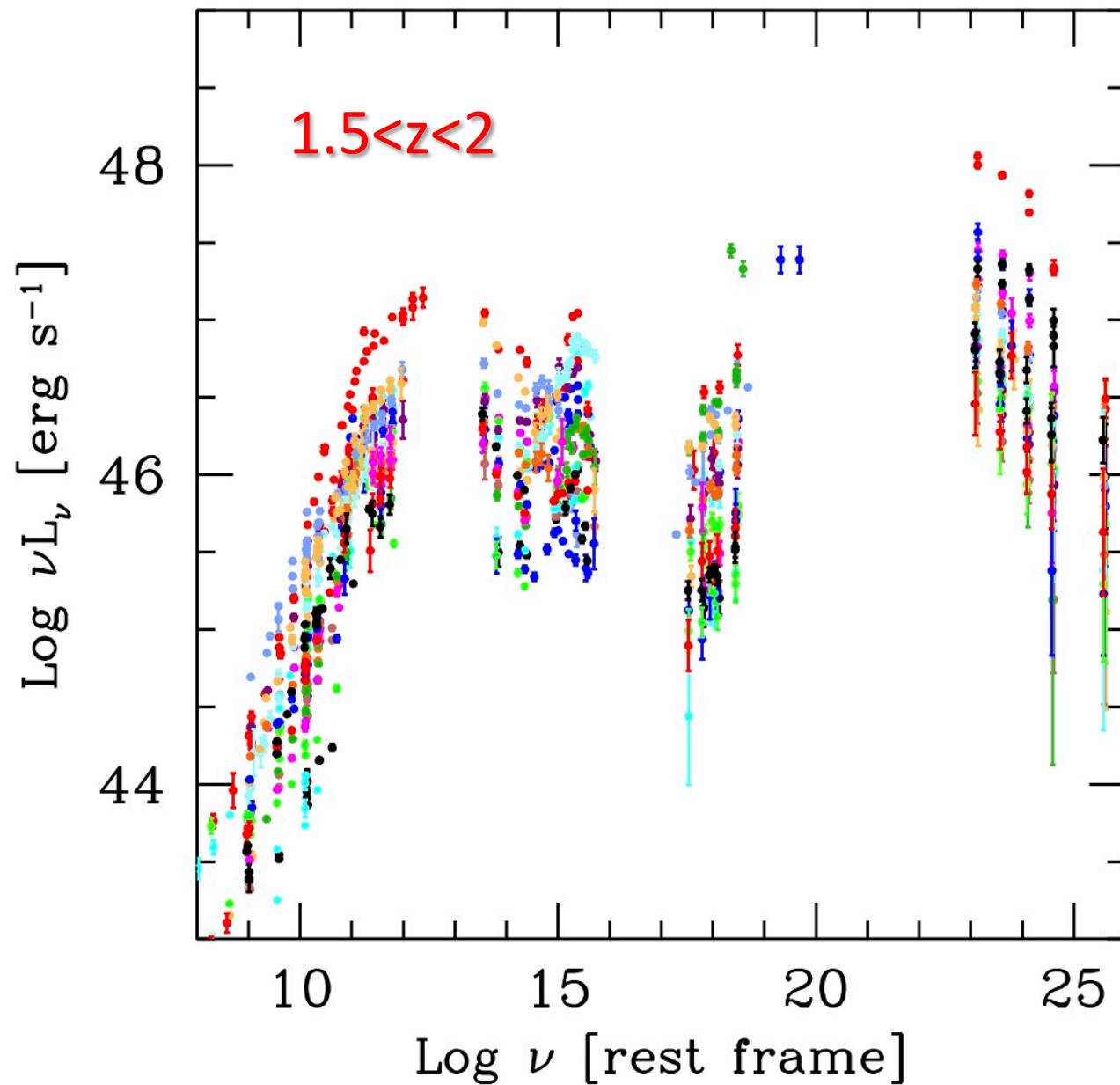


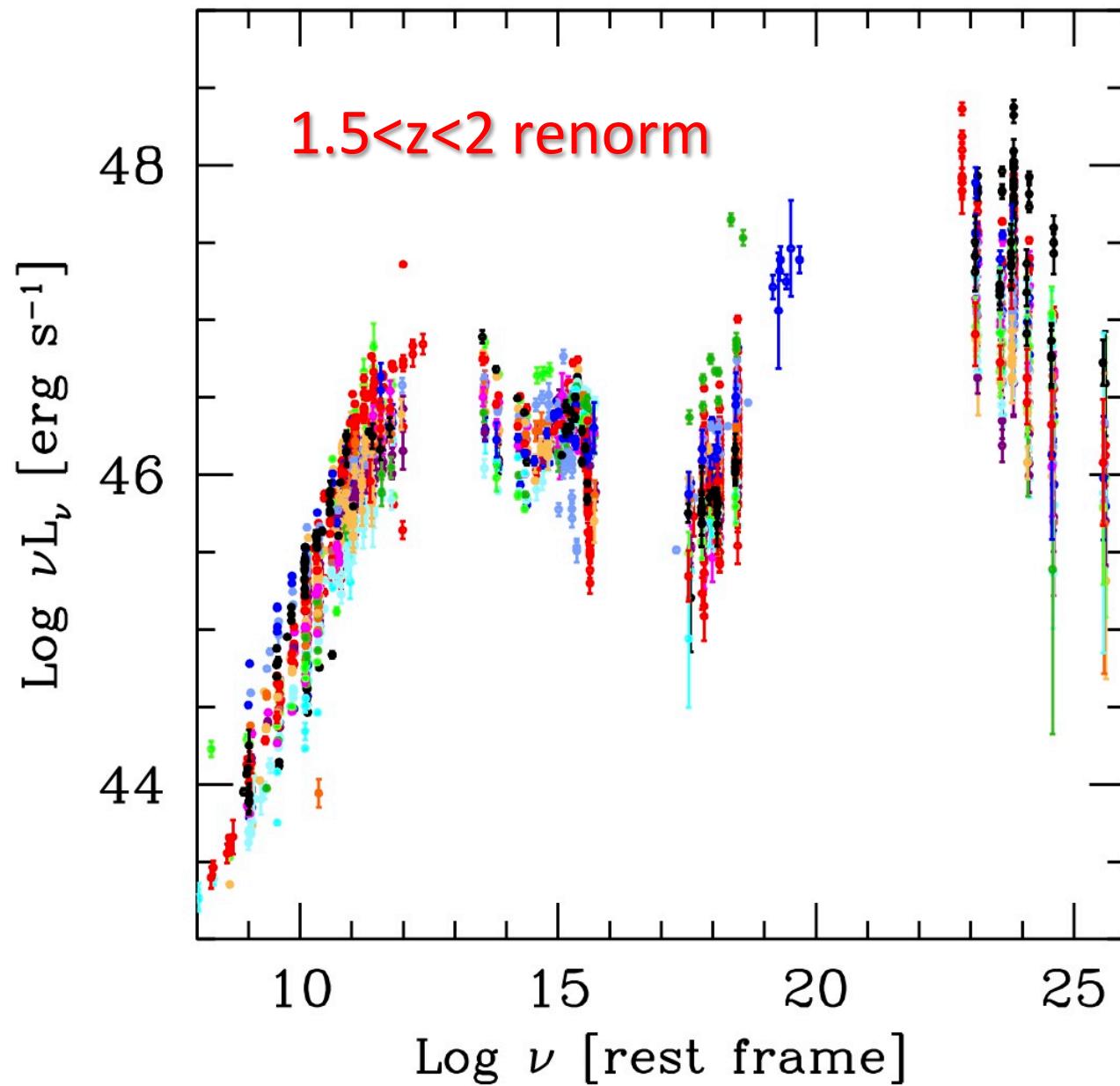


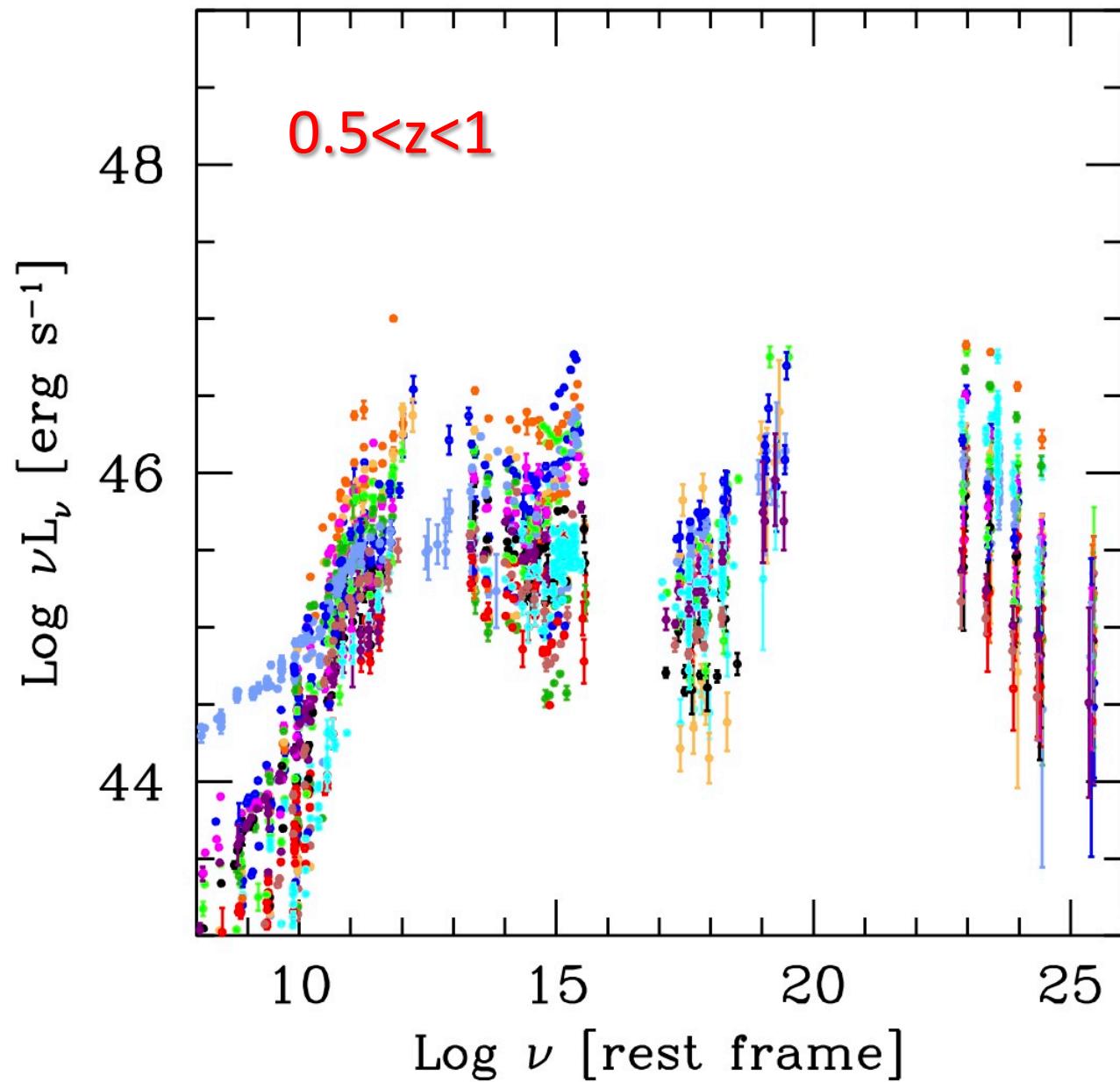


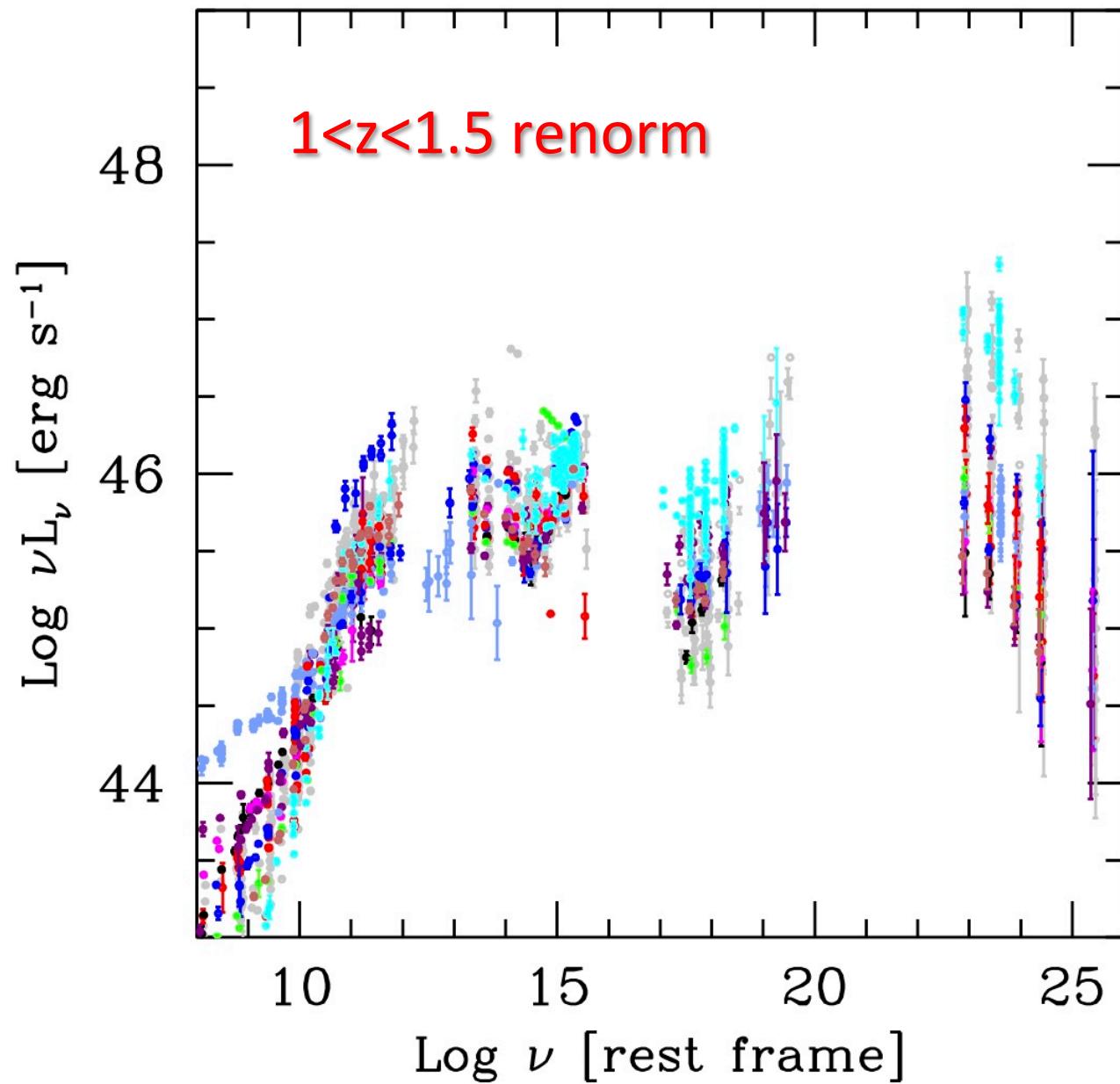


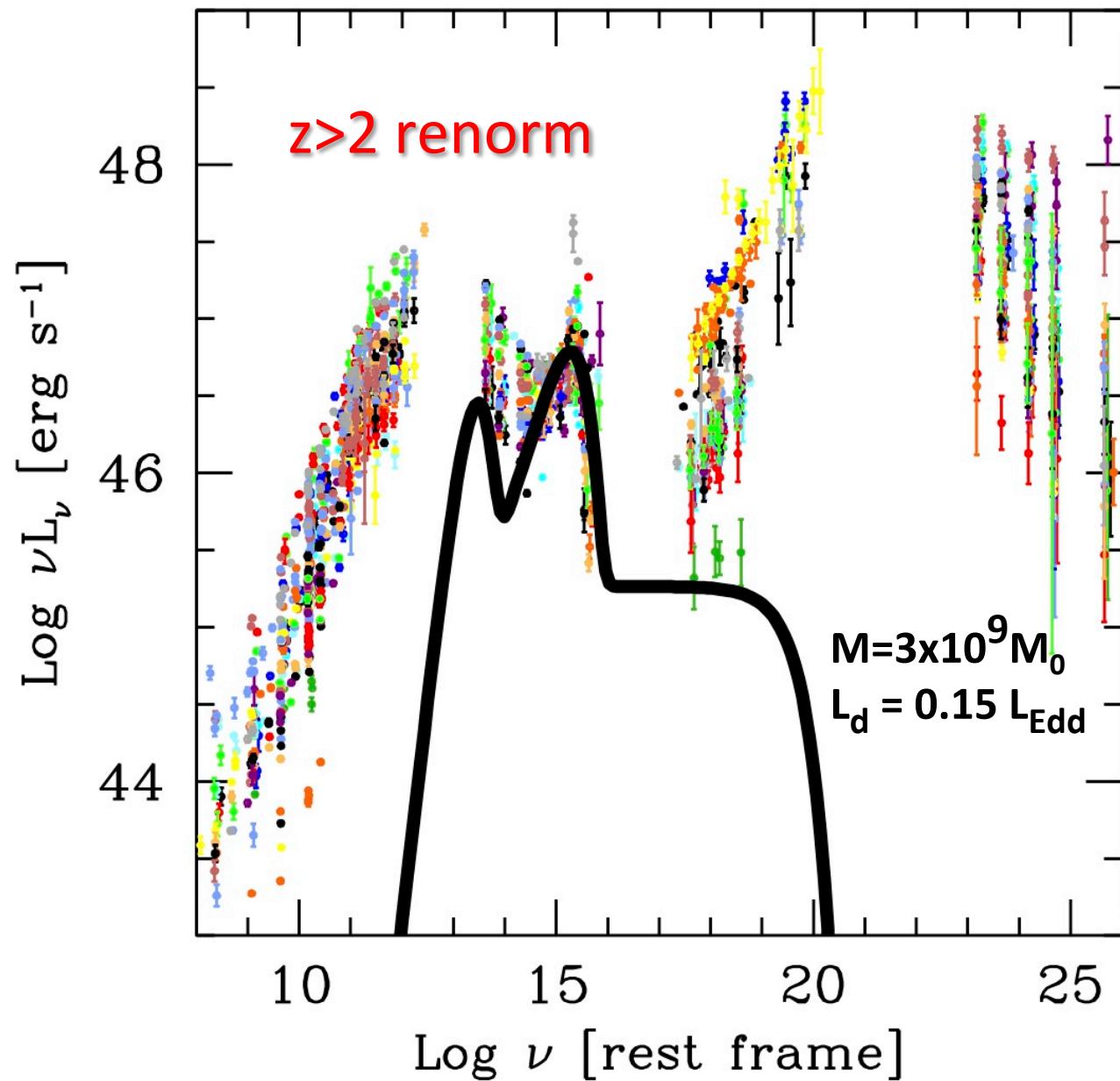


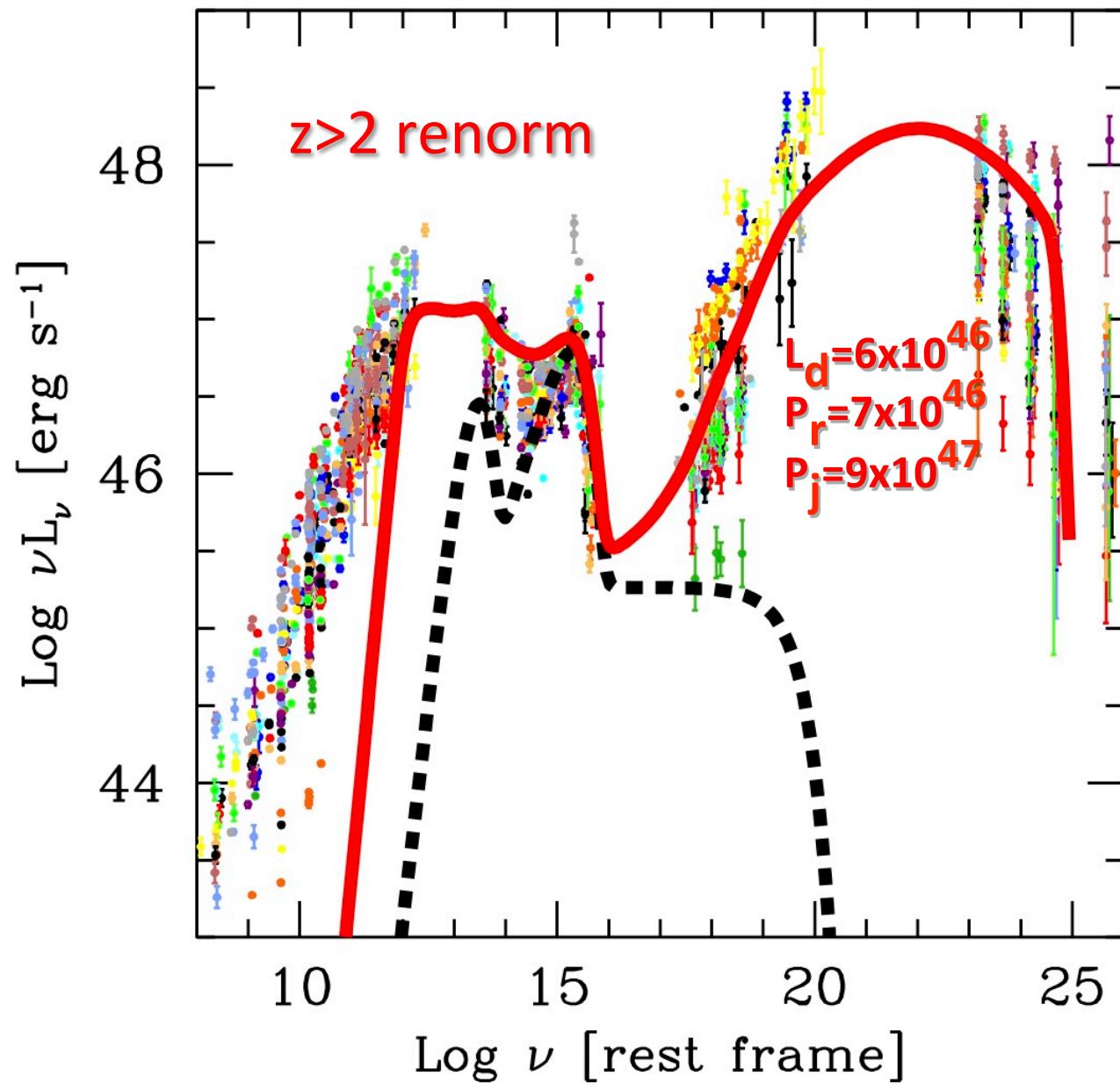




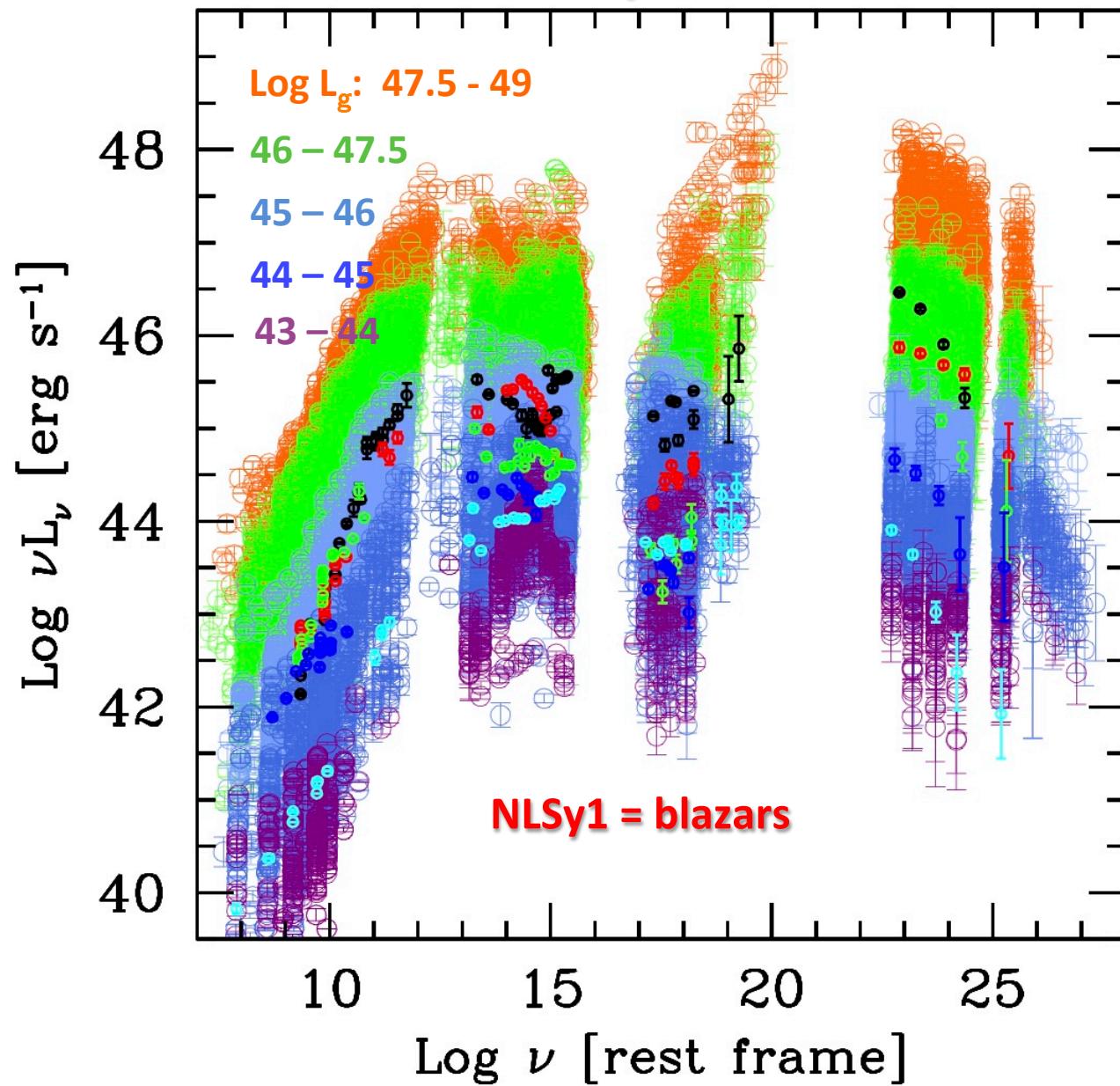


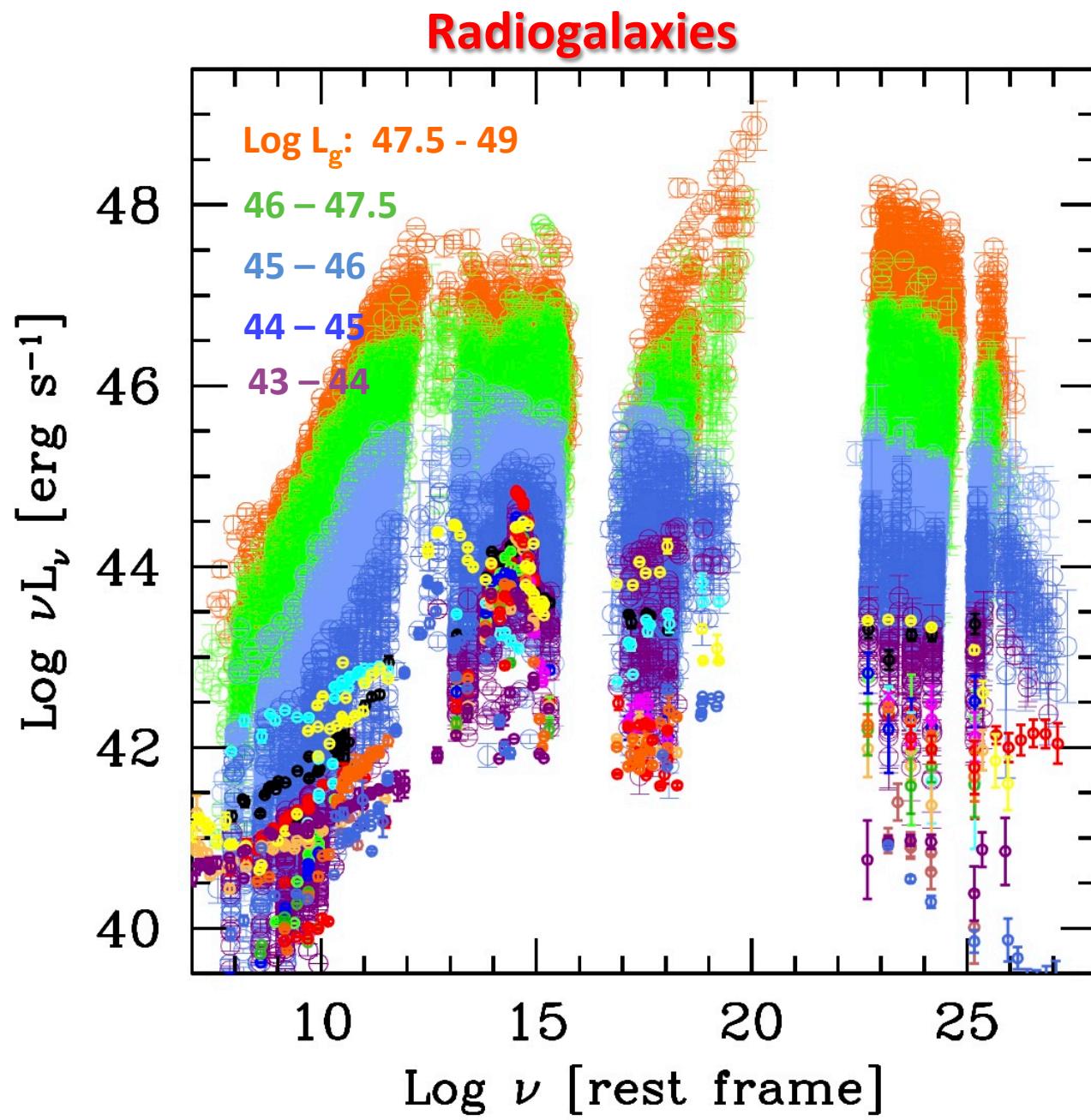


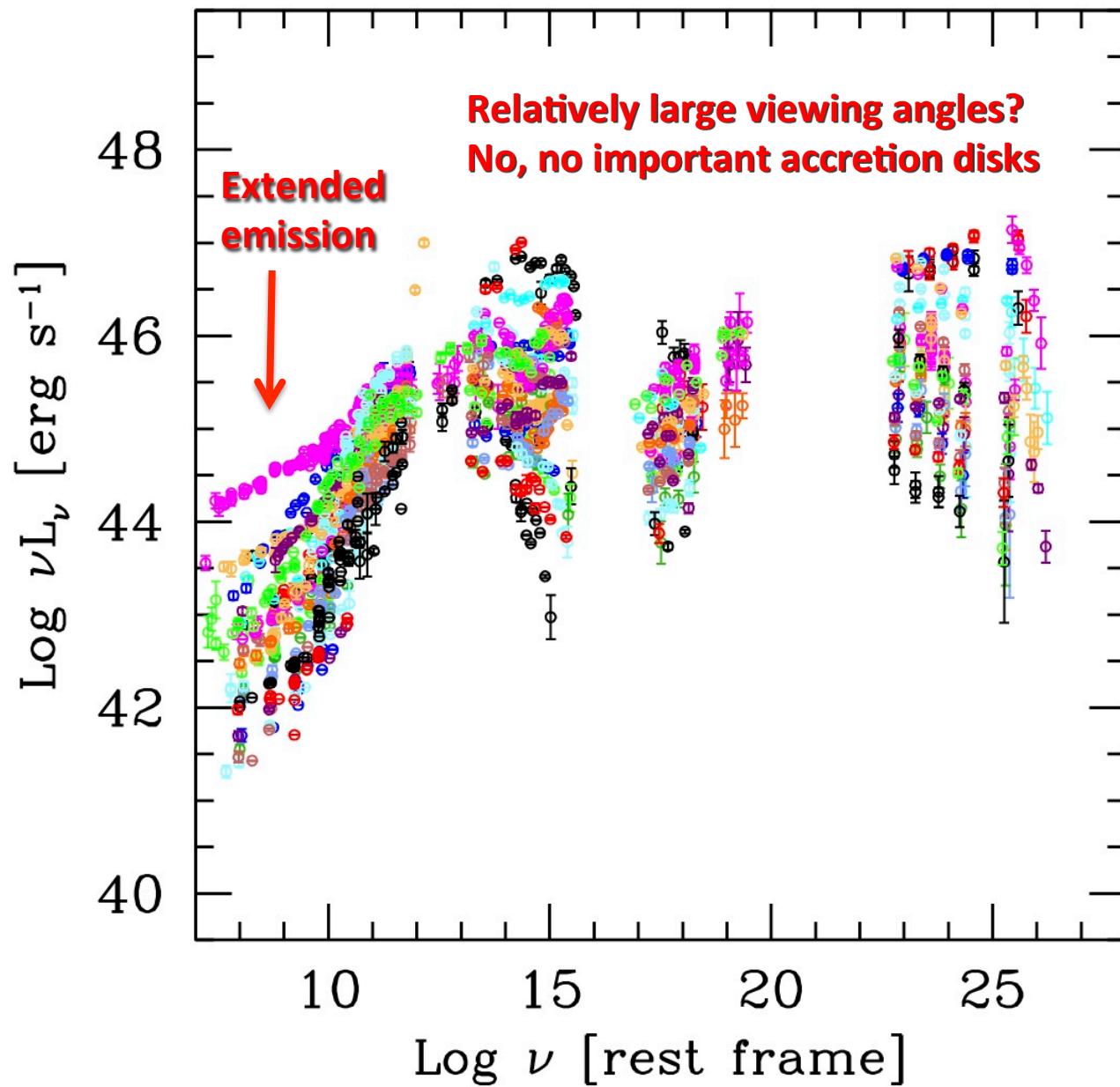




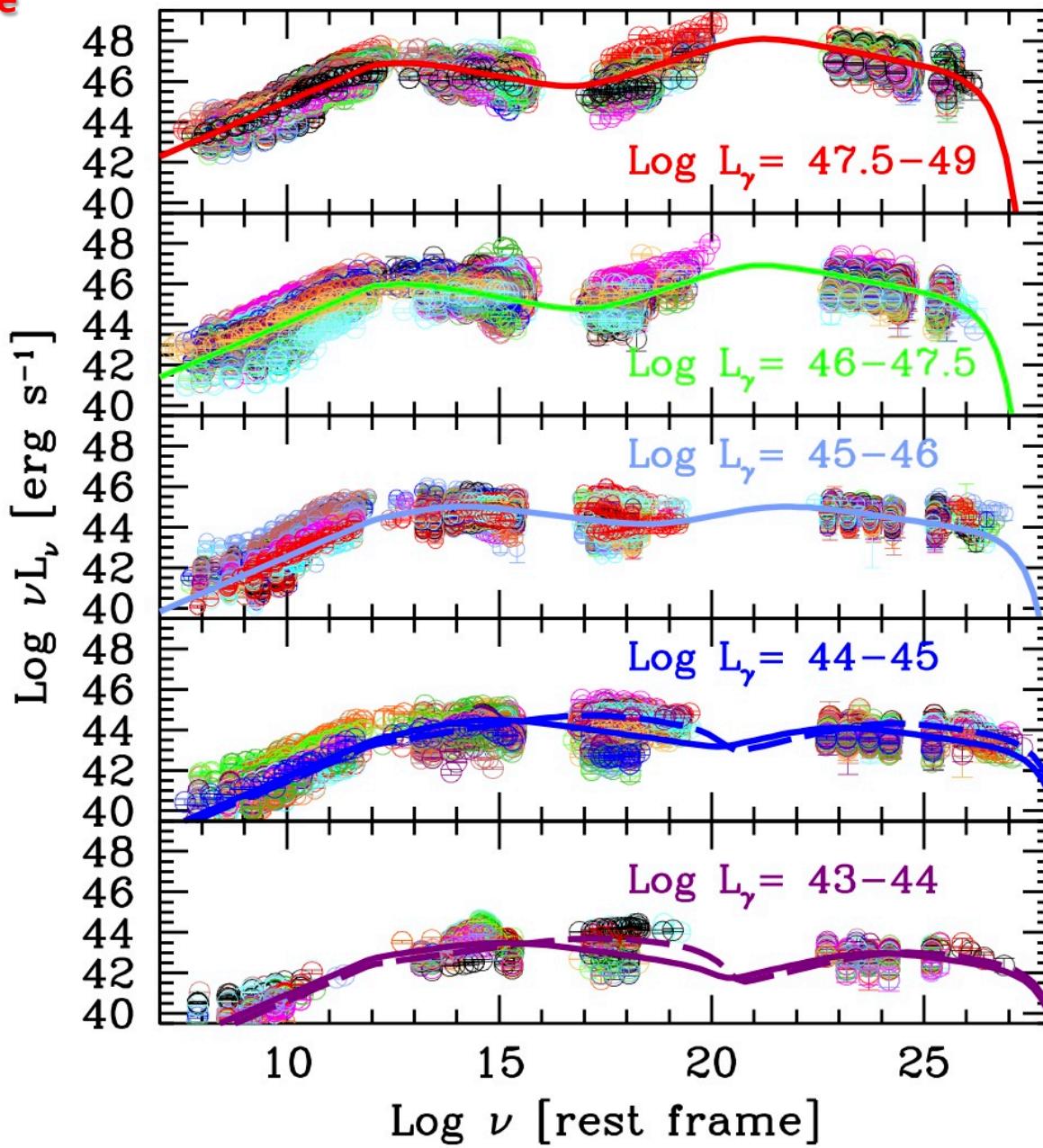
NLSy1

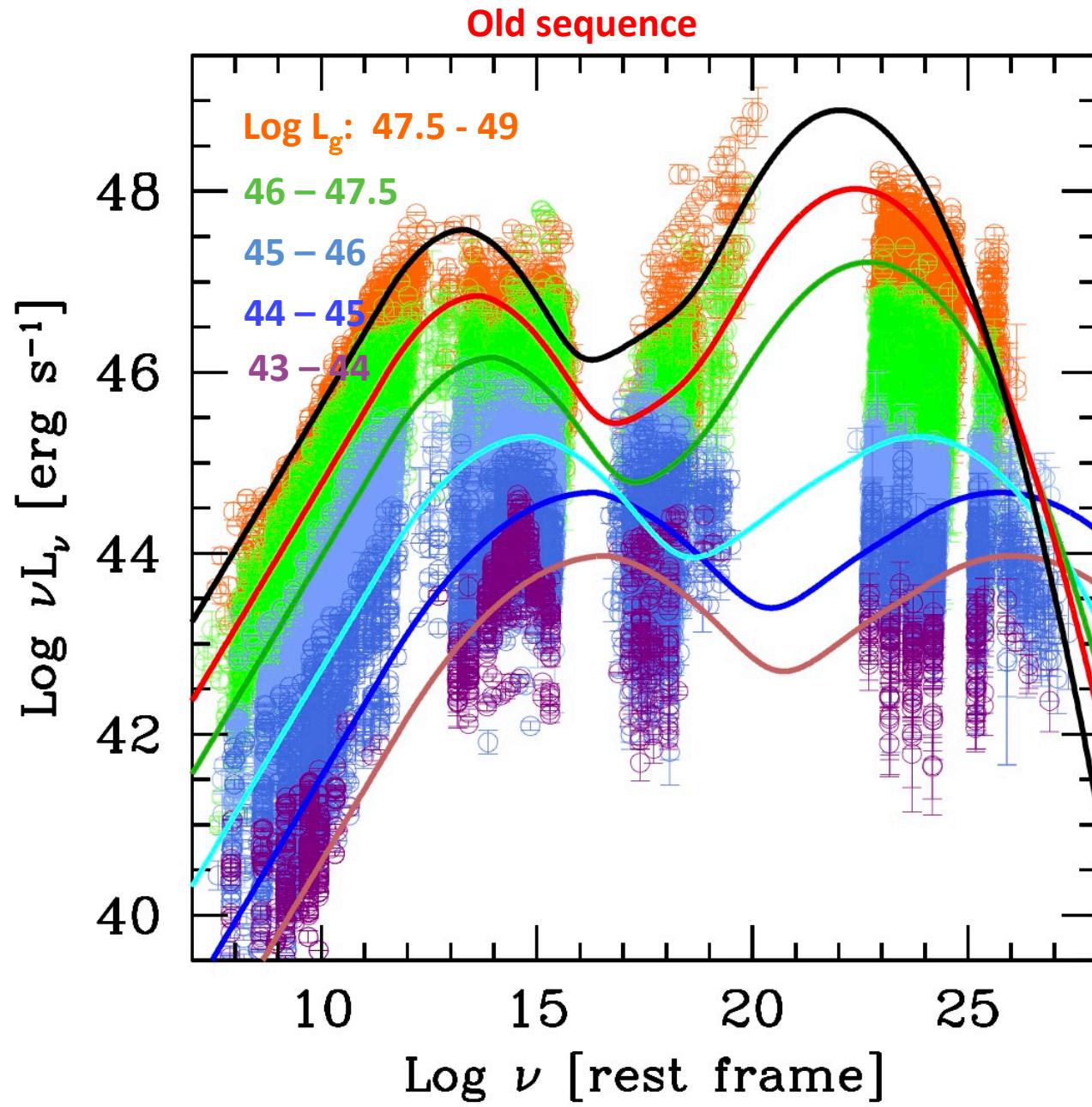


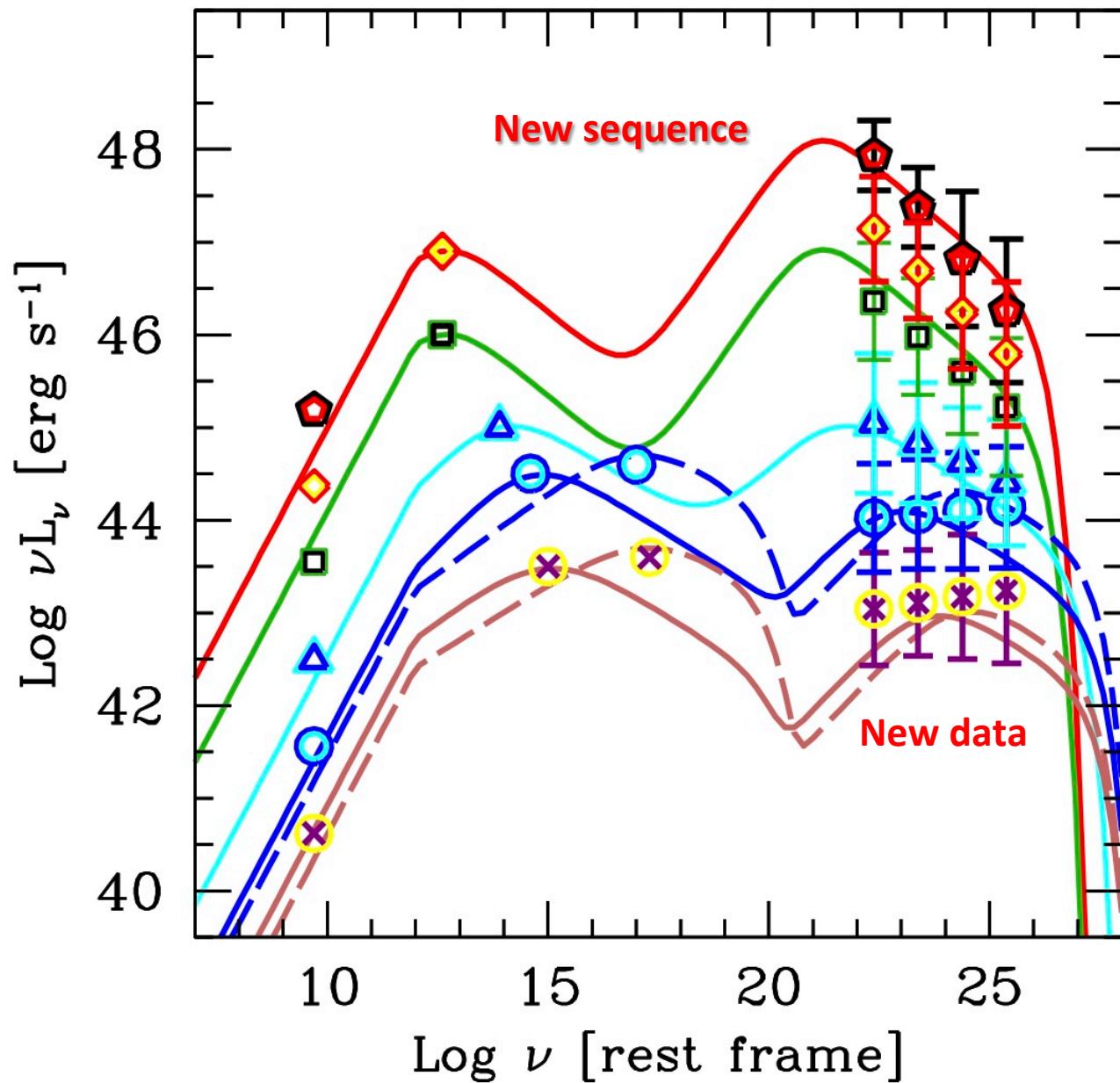




New sequence







Picasso

