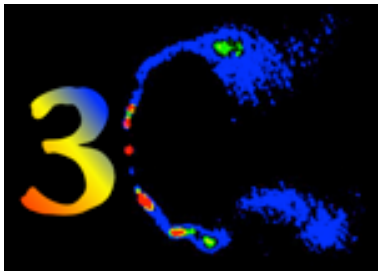

Contribution ID: **44** Type: **not specified**

Acceleration of AGN jets on parsec-to-kiloparsec scales.

Friday, 20 September 2019 11:20 (20 minutes)

We probe jets kinematics in 11 radio-loud AGN without relying on multi-epoch VLBI kinematics analysis. The method is based on measuring multi-frequency total flux density time delay and core shift in the jets. Our estimates of the apparent jet speed are consistent with the highest velocities seen by VLBI. We derive Doppler factors, Lorentz factors and viewing angles of the jets, as well as the corresponding de-projected distance from the jet base to the core. The results support evidence for acceleration of the jets with bulk motion Lorentz factor $\Gamma \propto R^{1/2}$ on de-projected scales R of $0.5 - 500$ parsecs.

Primary authors: KUTKIN, Alexander (ASC LPI); PASHCHENKO, Ilya (ASC LPI); Dr SOKOLOVSKY, Kirill; KOVALEV, Yuri (Astro Space Center of Lebedev Physical Instiute); ALLER, Margo (University of Michigan); Prof. ALLER, Hugh (University of Michigan)

Presenter: KUTKIN, Alexander (ASC LPI)

Session Classification: Quasars and Blazars: the heritage of 3C273, 3C279, and 3C454.3