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## Multi-TeV flaring from blazars: Markarian 421 as a case study

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The TeV blazar Markarian 421 underwent multi-TeV flaring during April 2004 and simultaneously observations in the X-ray and TeV energies were made. It was observed that the TeV outbursts had no counterparts in the lower energy range. One implication of this is that it might be an orphan flare. We show that Fermi-accelerated protons of energy  $\leq 168$  TeV can interact with the low energy tail of the background synchrotron self-Compton photons in the inner region of the blazar to produce the multi-TeV flare and our results fit very well with the observed spectrum. Based on our study, we predict that the blazars with a deep valley in between the end of the synchrotron spectrum and the beginning of the SSC spectrum are possible candidates for orphan flaring. Future possible candidates for this scenario are the HBLs Mrk 501 and PG 1553 + 113 objects.

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