



Off-Axis Energy Variability of AGNs: a New Paradigm for Broad-Line- and Continuum-Emitting Regions

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The general picture of how thermal AGNs work has become clearer in recent years but major observational puzzles threaten to undermine this picture. These puzzles include AGNs with extremely asymmetric emission line profiles, inconsistent multi-wavelength variability, rapid apparent changes in the sizes of emitting regions and in the direction of gas flow, a curious insensitivity of gas in some narrow velocity ranges to changes in the ionizing continuum, and differing dependencies of polarization on gas velocity. It is proposed that all these puzzles can readily be explained by off-axis variability, and that there is no need to invoke exotic explanations such as binary supermassive black holes or recoiling black holes.

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