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THE EXTREMES OF AGN VARIABILITY: OUTBURSTS, DEEP FADES, CHANGING-LOOKS, AND EXCEPTIONAL SPECTRAL STATES

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We review results from ongoing monitoring campaigns (in the optical, UV, X-rays and radio) on some of the most highly variable AGN known, and the identification of new AGN in extreme flux or spectral states, including some of the highest-amplitude outbursts observed to date, deep low-states, unexpected long-term trends, and systems which exhibit extreme Seyfert-type transitions ("changing-look AGN"). Long-term lightcurves, densely covered for multiple years, and follow-up spectroscopy in different spectral bands are used to shed light on the underlying variability mechanisms including accretion disk and broad-line region physics. Remarkable differences are seen, for instance, in the optical spectral response to extreme outbursts, implying very different intrinsic variability mechanisms. If time allows, I will also review most recent results from multi-year projects to test binary supermassive black hole models of the highly variable blazar OJ 287.