Testing a stochastic variability model of optical EVPA rotations in blazars with RoboPol data

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Model
1. Polarization fraction drops during rotations

(Blinov et al. 2016a)
2. Some blazars do not rotate the EVPA

(Blinov et al. 2016b)
3. Rotation characteristics
1. Amplitude $\Delta \chi$

2. Duration $T_{rot}$
4. Fractional polarization
Parameter space

$n_{var}$

$N_{cells}$
Summary

**Observation**

1. Polarization fraction drops during rotations  
   - Random walk simulation: ✓

2. Some blazars do not rotate the EVPA  
   - Random walk simulation: ✓

3. Rotation characteristics  
   - Random walk simulation: ✓

4. Fractional polarization  
   - Random walk simulation: ✗