# **Quasi-Periodic Pulsations in EUV Brightenings**

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#### **\$** QPPs as an Intrinsic Feature of Flares EUV Brightenings (Small-Scale flares?) Berghmans+21 3D simulations (Chen+21) in Standard Solar Flares in EUV Brightenings (a) Top View dot-like



## EUV Brightenings Observed by the Solar Orbiter/EUI HRIEUV 174 Å at 0.29 au

~105 km/pix & 3 s cadence

val Observatory



# QPP Detection Method Applied to EUV Brightening Light Curves



## Statistical Comparison of QPPs in EUV Brightenings and Larger-Scale Flares



#### 30 70 60 25 Brightenings [%] 50 Rate 20 40 ╞ Ce 15

#### in Contrast to





#### Conclusions

- The robust presence of QPPs in EUV brightenings supports the interpretation that these events may be small-scale manifestations of flares.
- The absence of period scaling with loop length further suggests that standing waves may not be the primary driver of QPPs in these events.