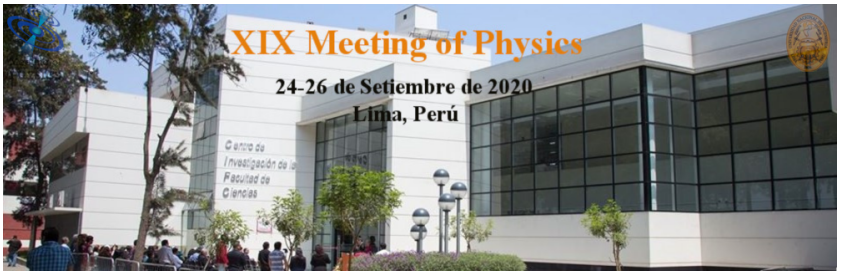


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# SUBMILIMETRIC OPACITY VARIABILITY IN MINUTE SCALES

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Water vapor is the main cause of atmospheric attenuation at high frequencies. The measurement of atmospheric opacity ($\tau$ ) is important because it allows us to obtain the true brightness temperature of an astrophysical object. Melo et al. (2005), presented the method of brightness of the Sun to determine atmospheric opacity in sub-millimeter waves. Then, using the same method Cornejo et al. (2017) estimated the opacity at 212 and 405 GHz for the period of 2006 and 2014. The measurements were made with the Solar Telescope for Sub-Metallic Waves (SST), at the El Leoncito Astronomical Complex (CASLEO). In this work we will use a new method to calculate the variation of opacity in time scales from minutes to hours. We will use the opacities determined by the method of brightness as an input parameter, on days when the Sun does not have any active regions. The method assumes that any observed intensity variation is then due to $\tau$ variations in the observation direction.

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