## P107a Disk Structure around the Class 0 Protostar in L1527

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Exploring initial conditions of disk formation around Solar type protostars is a very important issue in understanding the origin of the Solar System, and many observational and theoretical approaches have been made. On the other hand, the observational difficulty is to disentangle a disk from an inner envelope both of which are deeply embedded in a dense core. This is particularly true for an infant disk. In this situation, we have found an ideal target source in such an infant stage; i.e., the protostar and the disk is still growing. It is L1527, a Class 0 protostar in Taurus, whose edge-on disk is extended up to ∼100 au. In this source, we have resolved the vertical structure of the edge-on disk by our recent high-angular-resolution (∼0.2") observations at 0.87/1.2 mm using ALMA. In the maps of CCH and other molecular species, we have found that the envelope changes its thickness sharply to be much broader around the radius of ∼150 au, and the broadening continues to the centrifugal barrier (∼100 au), suggesting gas-stagnation due to the accretion shock (ASJ, March/2017, P138a). In addition to the gas components, we have recently made a careful analysis of the dust continuum emission in the both bands. As a result, we have found that the dust continuum emission also shows the broadening of the envelope thickness around the centrifugal barrier. The dust is spread in the vertical direction in the envelope while the change in the thickness is seen at a little smaller radius in the gas. We will report the further detailed analyses of the dust emission in this source.