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Dressing effects on the occurrence scattering time retardation and advance in a dusty plasma MYOUNG-JAE LEE, YOUNG-DAE JUNG, Hanyang University, HANYANG PLASMA TEAM — The dressing effects on the occurrence scattering time for the dust-dust interaction are investigated in a complex plasma. The first-order eikonal analysis is applied to obtain the scattering amplitude and the occurrence scattering time for the dust-dust interaction. The result shows that dressing effect enhances the retardation phenomena of the occurrence scattering time in the forward scattering domain. It is shown that the oscillatory behavior of the scaled occurrence scattering time is getting more significant with an increase of the Debye length. It is also found that the retardation domain of the occurrence scattering time increases with a decrease of the Debye length. The variation of the occurrence scattering time retardation and advance due to the dressing effect is also discussed.

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