When we imagine debris disks, we think about comets and asteroids, perhaps interacting with nearby planets - but all that we actually see is just tiny dust grains. One important effect that links the visible small and the invisible big is collisions. A cascade of collisions can grind down a km-sized planetesimal into micron-sized dust grains.

I will review how collisions shape both the spatial and the size distribution of the observed dust, and in turn, what that dust can or cannot tell us about the properties and evolution of the planetesimals.