sedimentation = biased random walk

$$F_{SED} \longrightarrow$$



**# particles / volume**

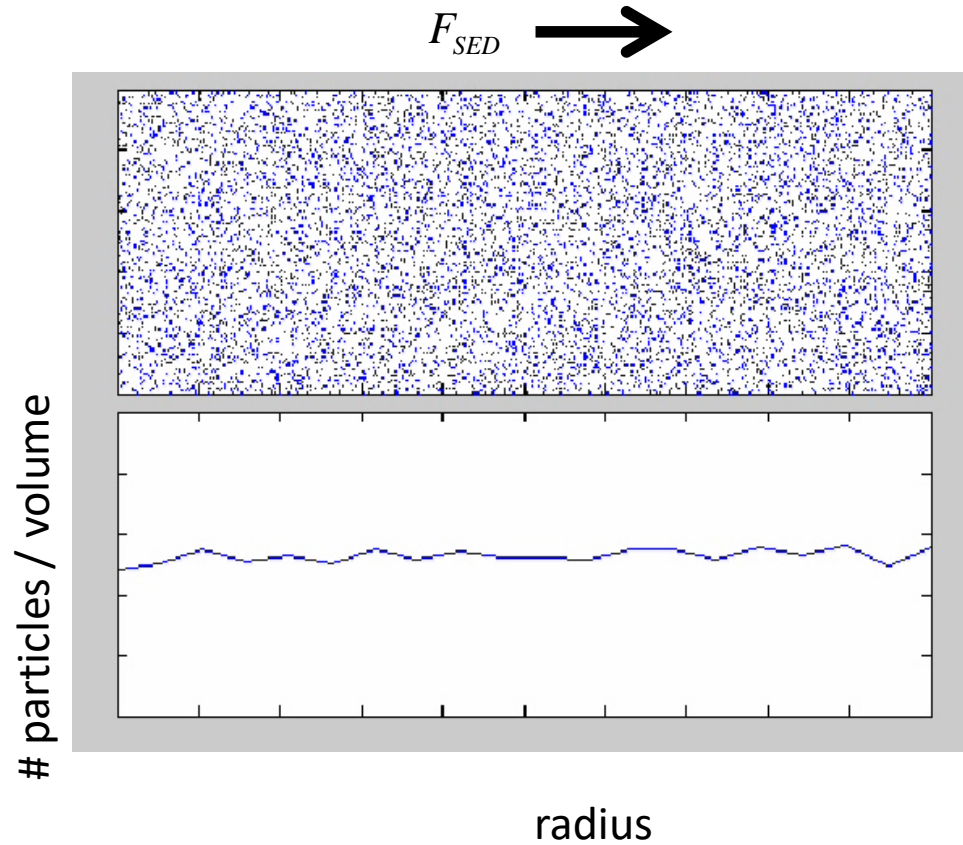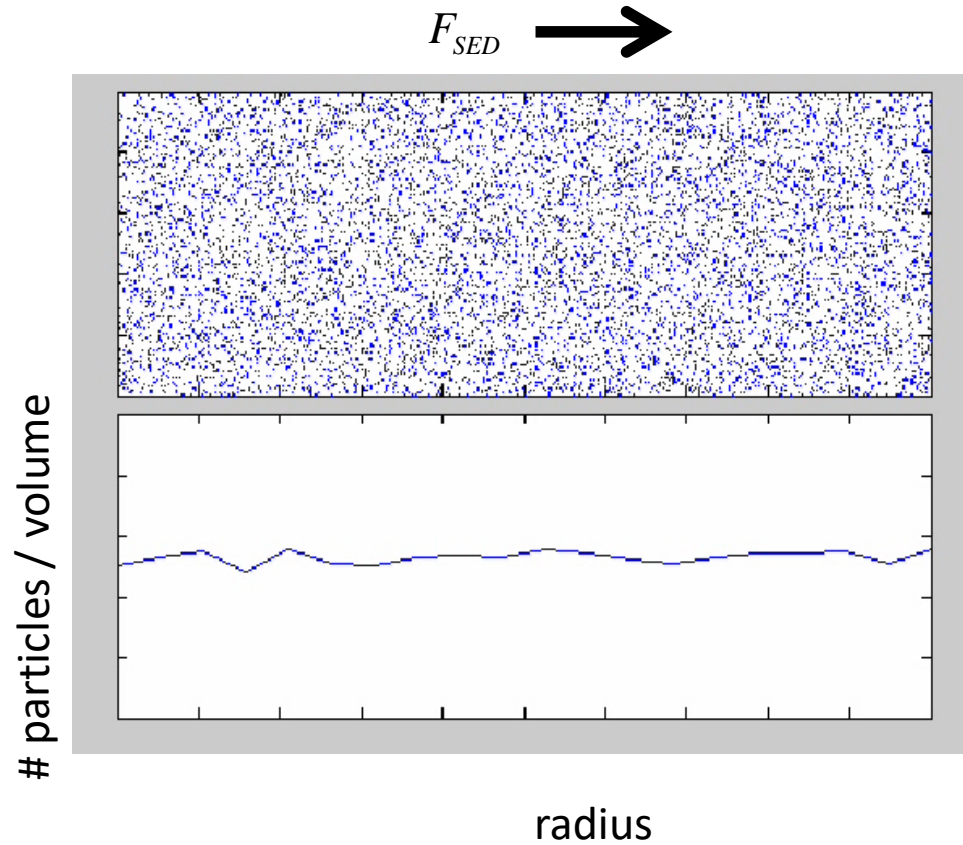**radius**

→ real-time detection systems triggered with revolution of rotor
→ allows to measure sedimentation, diffusion, polydispersity

$$M(1 - \bar{v}\rho) = \frac{s}{D}RT$$

sedimentation = biased random walk

$F_{SED}$ →



# particles / volume

radius

→ after long time, thermodynamic equilibrium reports on buoyant molar mass

$$c(r) = c(r_0) \exp^{\frac{M(1-\bar{v}\rho)}{RT}\frac{1}{2}(r^2-r_0^2)}$$

**for study of protein complexes**