Shear flow in a rotating frame of reference

\[ a = (x - x_o) \cos \Omega t \]
\[ b = (x - x_o) \sin \Omega t \]
\[ c = (y - y_o) \sin \Omega t \]
\[ d + b = (y - y_o) \cos \Omega t \]
**Summary:** Generalized Linear-Viscoelastic Constitutive Equations

**PRO:**
- A first constitutive equation with memory
- Can match SAOS, step-strain data very well
- Captures start-up/cessation effects
- Simple to calculate with
- Can be used to calculate the LVE spectrum

**CON:**
- Fails to predict shear normal stresses
- Fails to predict shear-thinning/thickening
- Only valid at small strains, small rates
- Not frame-invariant