

Ref.

1. R. D. Hazeltine, Plasma Physics, Vol. 15, pp. 77~80 (1973)
2. F. L. Hinton and S. K. Wong, POF, Vol. 28, p.3082 (1985)
3. P. H. Rutherford and E. A. Frieman, POF, vol 11, p.569 (1968)
4. R. D. Hazeltine, F. L. Hinton, POP 12, 102506 (2005)

Regarding Fokker-Planck equation,

$$\frac{\partial f_i}{\partial t} + \mathbf{v} \cdot \nabla f_i + \frac{e}{m_i} \left(\mathbf{E} + \frac{\mathbf{v}}{c} \times \mathbf{B} \right) \cdot \frac{\partial f_i}{\partial \mathbf{v}} = C_i + S_i \quad \text{ref.2 - 1}$$

If we consider flow, and then transform to a local reference frame, moving with the velocity \mathbf{u}_0 relative to the lab frame, in which the velocity is[2]

$$\mathbf{v}' = \mathbf{v} - \mathbf{u}_0(\mathbf{x}, t) \quad \text{ref.2 - 2}$$