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## **Relaxation to CKW state in a transport calculation**

### **Summary**

Using a transport model based on BAMPS, we investigate the evolution of magnetic field in a system of charged particles, which is embedded in a cylinder with the periodic boundary condition. We find that when the ratio of the helicity to the magnetic energy goes to a maximum, the system relaxes towards the CKW state with  $\nabla \times B \parallel B$ , which explained the reversal of the magnetic field in pinch experiments by Budin in 1970s and provided the feasibility of BAMPS for the research of magnetic field in quark-gluon plasma.

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