

### **3. DAMPING OF WIGGLER FIELDS**

#### **3.1 INTRODUCTION**

In the previous chapter, the plasma medium switched on at  $t=0$  is considered to be lossless. We now introduce a collision frequency,  $\nu$ , which makes the plasma lossy. This term is incorporated into the momentum equation and expressions for the damping are generated.

The dependence of the damping expressions on  $\omega_p$  and  $\omega_b$  is studied. The damping terms are incorporated into the expressions for the wiggler fields and their effect is examined.