本書の読解のために必要な事柄を以下に記述する.

0.1 スカラー積

ベクトルa,bについてスカラー積を次のように定義する.

$$\boldsymbol{a} \cdot \boldsymbol{b} = ab\cos\theta = a \cdot \boldsymbol{b}_{//} = \boldsymbol{a}_{//} \cdot b$$

0.2 ベクトル積

$$egin{aligned} oldsymbol{a} imes oldsymbol{b} = oldsymbol{a} imes oldsymbol{b}_{\parallel} + oldsymbol{b}_{\perp} \end{pmatrix} &= oldsymbol{a} imes oldsymbol{b}_{\perp} \ oldsymbol{a} imes oldsymbol{b} = oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b}_{\perp} \ oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} \ oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} \ oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} \ oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} imes oldsymbol{b} + oldsymbol{a} imes oldsymbol{b} \ oldsymbol{a} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} \ oldsymbol{a} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} \ oldsymbol{a} \ oldsymbol{b} \ oldsymbol{a} \ oldsymbol$$