Lecture 11b: Magnetic field gauge

The induction equation is given by

$$\frac{\partial B}{\partial t} = -\nabla \times E.$$  \hfill (1)

The uncurled induction equation is then

$$\frac{\partial A}{\partial t} = -E - \nabla \phi,$$  \hfill (2)

where $\phi$ is the scalar potential. In the PENCIL CODE, we usually use the Weyl gauge, which means $\phi = 0$.

See Candelaresi et al. (2011)

References