

# Notes on Electrodynamics

October 1, 2023

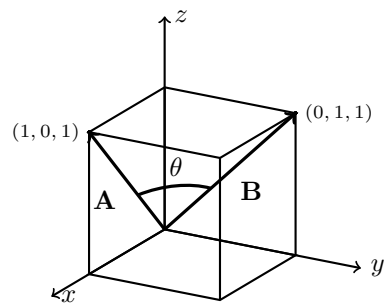
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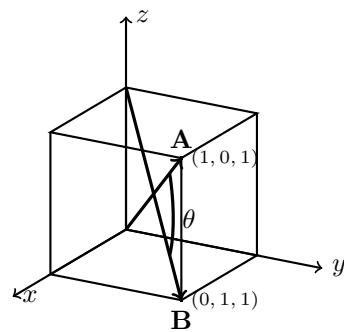
# 1 Vector Analysis

## 1.1 Vector Algebra

Face diagonals



Body diagonals



## 2 Potentials

### 2.1 Multipole Expansion

$$r = |\mathbf{r} - \mathbf{r}'|$$

Where  $r$  denotes the vector from a source point  $\mathbf{r}'$  to a field point  $\mathbf{r}$ .