

## Yani's cheap plastic AC generation handout

Consider this very simplified representation  
of an AC generator:

The rotating magnetic field induces a voltage across the aa' winding.  
The electrical representation of that is:

This produces sinusoidal voltage/current:

Consider the cross-sectional view of this generator:

Let's add two other windings bb' and cc', all separated at  $120^\circ$

The voltages induced on these windings will be  $120^\circ$  apart:

Two ways to connect the three windings: