WHO IS SHE?
THE CONTINENT?
BIRTH: COVINGTON, GA
Hollywood of the South
Dancing, singing, poetry, cooking, and pretty much anything artistic
EDUCATION AND INTERNSHIPS

Spelman College

NASA

The Coca-Cola Company
**RESEARCH:**

**MIT SUMMER RESEARCH PROGRAM**

- *Research in Quantum Computation and Quantum Information under Dr. Peter Shor.*

- *Created a new Hamiltonian which creates a quasicrystal structured ground state, while attempting to quantify the entanglement of said ground state.*

```
Step 1:           b  
  ↓              
Step 2:            a  
   \      /  
  ▼    ▼    
Step 3:         a  b  
     \  /   
    ▼▼▼▼
Step 4:       a  b  a  
        \  /   
          ▼▼▼▼
Step 5:     a  b  a  a  b  
            \  /   
               ▼▼▼▼▼▼▼▼
Step 6:  a  b  a  aba  b  a
```
Susceptible-Infected Model

\[
\frac{dX}{dt} = BN - Xc\beta\left(\frac{Y}{N}\right) - \mu X \tag{1}
\]

\[
\frac{dY}{dt} = Xc\beta\left(\frac{Y}{N}\right) - nY \tag{2}
\]

\[
\frac{dN}{dt} = BN - \mu X - nY \tag{3}
\]

X is the susceptible population, Y is the infected population, and N is the total population. \(n\) and \(\mu\) are death rates, B is the population birth rate, c is the number of contacts a susceptible person makes per unit of time, and \(\beta\) is the probability of HPV transmission.
RESEARCH: SENIOR THESIS
ASSESSING THE COST OF PROVIDING HPV VACCINATIONS TO HOMOSEXUAL MALES

\[
\frac{dX}{dt} = +BN - Xc_\beta \left( \frac{Y}{N} \right) - \alpha X - \mu X \tag{1}
\]

\[
\frac{dY}{dt} = +Xc_\beta \left( \frac{Y}{N} \right) - nY \tag{2}
\]

\[
\frac{dZ}{dt} = +\alpha X - \mu Z \tag{3}
\]

\[
\frac{dN}{dt} = +BN - \mu X - nY - \mu Z \tag{4}
\]
RESEARCH: SENIOR THESIS
ASSESSING THE COST OF PROVIDING HPV VACCINATIONS TO HOMOSEXUAL MALES

Infected Population

TIME (YEARS)

POpULATION (1.0E+06)

- Without Vaccination
- With Vaccination
EPIDEMIOLOGY OR MOLECULAR BIOLOGY?