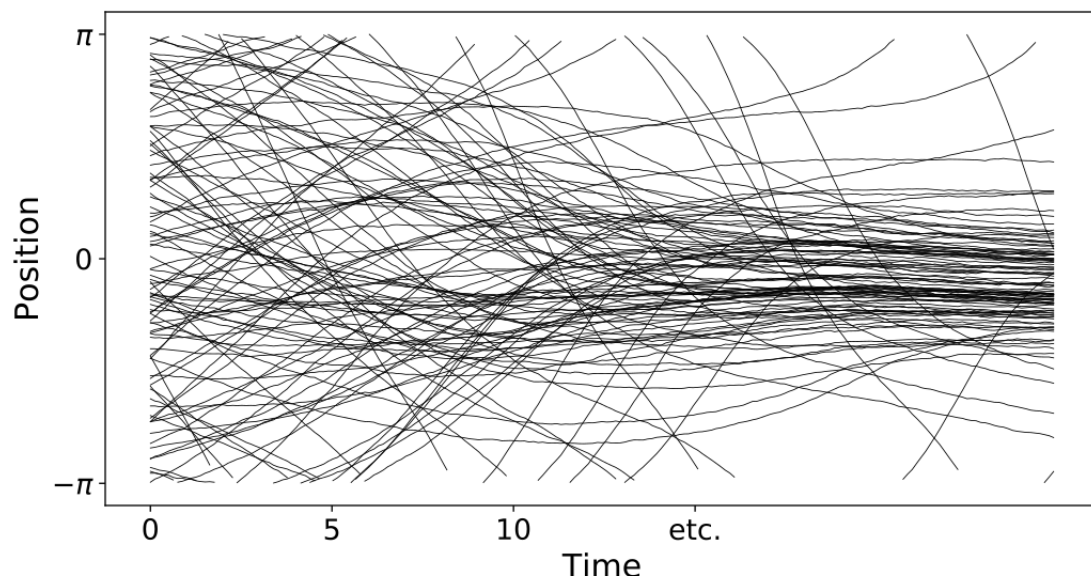


---

## The Kuramoto model and superconducting quantum computers

---



Chiari EVEN  
M1 Compuphys 2022

*Supervisor :* David VIENNOT  
*with the help of :*  
Maxime Legrand  
Abelrahman Abouelenain

## **1 introduction**

## **2 $\alpha$ - code**

### **2.1 Integrators of first order differential equations**

### **2.2 Dynamics simulation of Kuramoto model**

### **2.3 $R$ and $\Psi$ to describe the evolution of Kuramoto Model**

### **2.4 Local Shannon entropy**

### **2.5 Graph describing Kuramoto Model**

## **3 $\alpha$ - physcial study**

## **4 $\beta$ - code**

## **5 $\beta$ - physcial study**