## Topological entanglement entropy of xxx system

Yong Sun

2015-11-10

# Introduction

#### definition

Von Neumann entanglement entropy:

$$S(\rho_A) = -Tr[\rho_A \log \rho_A] = -Tr[\rho_B \log \rho_B] = S(\rho_B)$$

where  $\rho_A = Tr_B(\rho_{AB})$  and  $\rho_B = Tr_A(\rho_{AB})$  are reduced density matrices.

for 2d CFT: some cool stuff topological entanglement entropy

### motivation

### **Breakfast**

- ► Eat eggs
- ► Drink coffee

In the evening

### Dinner

- ► Eat spaghetti
- Drink wine

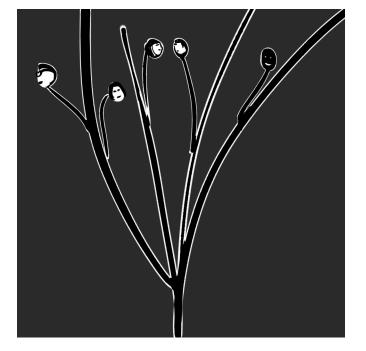


Figure 1: picture of spagnetti

# Going to sleep

- ► Get in bed
- Count sheep