# ${\bf C^*\text{-}ALGEBRAS,\ AND}$ THE GELFAND-NAIMARK THEOREM

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### 1. Preliminaries

we will assume knowledge on... brief(er than asst 3) history

#### 2. Basics

## 2.1. Definitions.

**Definition 1** (C\*-algebra).

define C\*algebras, states, representations, the weak\* topology

3. Representations of C\*-algebras

to include all representation theory, including GNS, CGN and GN