

# Allocators

Henruch Lauko

May 18, 2016

# Motivation



# Block ?

# C++ Allocators API Requirements

- ▶ `Block allocate(size_t)`
- ▶ `void deallocate(Block)`
- ▶ `bool owns(Block)`

# Allocators

- ▶ NullAllocator
- ▶ Mallocator
- ▶ StackAllocator
- ▶ FallbackAllocator
- ▶ Freelist
- ▶ Segregator
- ▶ AffixAllocator
- ▶ StatisticCollector
- ▶ BitmappedBlock

# FallbackAllocator

- ▶ Owns- MDFINAE

- ▶ TODO problems

# Segregator



# AffixAllocator

# BitmappedBlock

# Modularity - composability

- ▶ composition of allocators, specialized by block sizes
- ▶ arrays, lists, trees of allocators

# Example

# Benchmarks