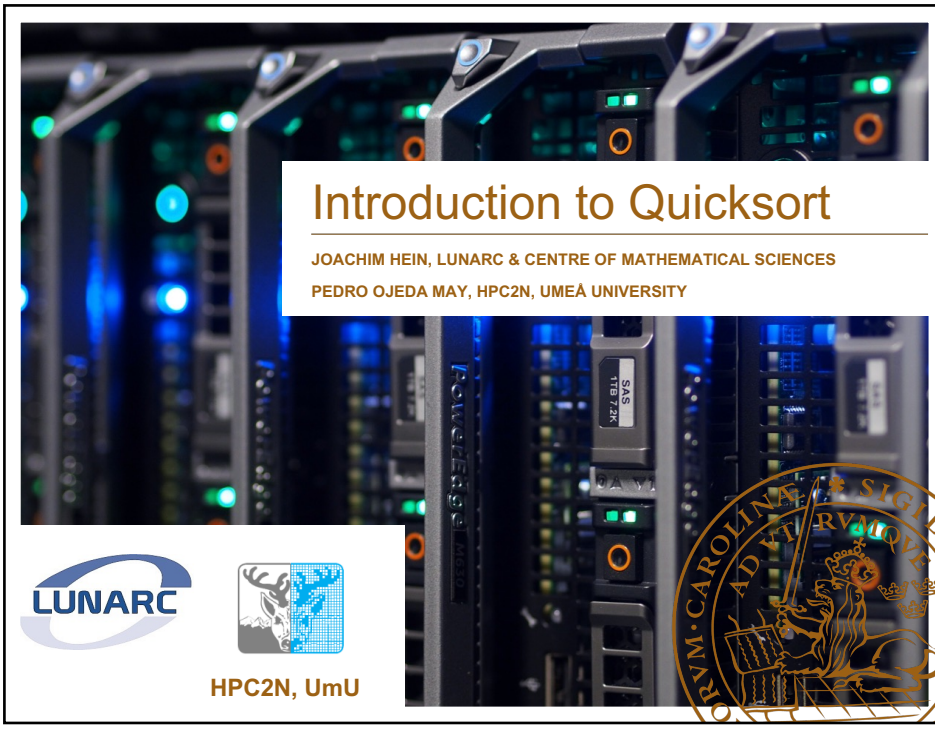

1

Overview

- Vector registers
- SIMD construct
- Declare SIMD construct to vectorise functions

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2

We want to sort a long array of numbers

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3

Pick a pivot

- For picking a pivot there are a number of choices, e.g.
  - Random
  - Centre
- The template picks the last element

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4

Do a partial sort

- Elements smaller than the pivot
  - place in the left of the array
- Elements larger than the pivot
  - place on the right of the array
- Place the pivot between the two parts
  - The pivot is in the final place!
- Nothing requires moving from left to right and vice versa

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5

Run quicksort on each part

- Pick a pivot on the yellow side
- Do a partial sort
- Do the same to the blue side

- p, q, r are in the right place
- Call quicksort recursively on each section

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6