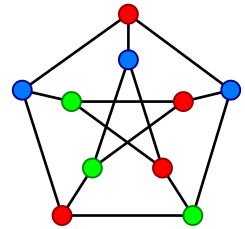
# Preamble



- Graph algorithms?
- Schedule

  - 14 weeks

  - Course: Mon. 11:15 (room 301)

  - Exercises: Mon. 14:15 (room 301)
- Evaluation

  - Exam

  - Mini-project or mini-course
- People

  - Arnaud Casteigts (course)

  `arnaud.casteigts@unige.ch`

  - Matteo De Francesco (exercises)

  `matteo.defrancesco@unige.ch`
- Resources

  `https://arnaudcasteigts.net/teaching/`

  + Moodle (exercises, communication)

- Content (indicative)

  1. Definitions and basic concepts
  2. Traversals, connectivity testing, shortest paths
  3. Minimum spanning trees and matroids
  4. Mini-course on computational complexity (NP-hardness, reductions)
  5. Graph coloring, Independent sets, Cliques
  6. Maximum matchings
  7. Approximation algorithms
  8. Random walks & the page rank algorithm
  9. Distributed graph algorithms
  10. Temporal graph theory (I)
  11. Temporal graph theory (II)
  12. Temporal graph theory (III)

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  13. Student presentations (I)
  14. Student presentations (II)