- 1. Graphs on surfaces : embeddings, covers and lifts. Genus of a graph.
- 2. Hamiltonicity of graphs : Sufficient and necessary conditions.
- 3. Colorings of oriented graphs.
- 4. Domination vs independent domination in graphs.
- 5. Infinite graphs and graph limits.
- 6. Groups and graphs: Cayley graphs, automorphism group, group actions, transitivity.
- 7. Ramsey theory for graphs.
- 8. Nowhere-zero flows in graphs.
- 9. Universal graphs of graph families.
- 10. Intersection graphs of shapes (cycles...).
- 11. Complete colorings and the achromatic number.
- 12. Rainbow {colorings/paths/matchings...}
- 13. Arboricity of graphs.