

MINI-COURSE ON HARMONIC MAPS AND RELATED TOPICS

STEFANO MONTALDO

In this mini-course we shall present an introduction to the theory of harmonic maps as introduced by the seminal paper *Harmonic mappings of Riemannian manifolds* by J. Eells and J.H. Sampson in 1964. The content of the course will be the following:

- Operators on vector bundles;
- Harmonic maps: the first variation of the energy;
- General properties of harmonic maps;
- The second variation of the energy;
- Harmonic maps and minimal immersions;
- Some generalizations of harmonic maps.