

*A note on  $p$ -harmonic maps and  $p$ -biharmonic maps*Nguyen Dang Tuyen<sup>1</sup>

In this talk, we will discuss some recent results on  $p$ -harmonic maps and  $p$ -biharmonic maps. First, we give many sufficient conditions to obtain the harmonicity of the  $p$ -biharmonic maps. Then, we provide conditions on the manifolds and the map under which we can obtain the Liouville theorem for the  $p$ -harmonic map from gradient Ricci solitons. This talk is based on the joint works with W. Barker, N.T. Dung, K. Seo and T.N. Minh.

**Keywords:**  $p$ -biharmonic maps,  $p$ -biharmonic submanifolds, Chen's conjecture, Minimal submanifolds.

---

<sup>1</sup>Hanoi University of Civil Engineering, Email: Tuyennnd@huce.edu.vn