Linear Functional Analysis in Metric Spaces

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Abstract:

As for the linear case, compactness for the strong topology is very restrictive. Since the beginning of the fixed point theory, weak-compactness offered an acceptable lternative in Banach spaces. But when we deal with metric spaces, this natural extension is no longer easy to implement. One has to go back to the linear case and investigate the weak-topology with a new eye. In this talk, I will share some of the ideas of how to extend concepts of linear nature to nonlinear spaces, i.e., metric spaces.

Short-bio: **Dr. Mohamed A. Khamsi** graduated from the École Polytechnique, Paris, France. He completed his PhD at the Pierre-et-Marie-Curie University, Paris, France. His research interests include Nonlinear Functional Analysis, Fixed Point Theory, Logic Programming, Discrete Mathematics, and Internet Mathematics Education. Dr. Khamsi is considered one of the world experts on Metric Fixed Point Theory