

Paper ID: PT-10**Fixed Points by Iterative Methods and Applications****Plenary Talk**Yumnam Rohen¹¹Department of Mathematics, Manipur University, Canchipur-795003, India*Email: ymnehor2008@yahoo.com, yumnam.rohen@manipuruniv.ac.in***Abstract**

Fixed point theory is a fundamental concept in Mathematics with applications across various fields. It focuses on expressing problems as equations involving operators and finding solutions by locating fixed points of these operators. This theory integrates principles from functional analysis, topology, and geometry, making it possible to translate complex theoretical or practical problems into fixed point tasks. Iterative methods are one of the widely used techniques to locate fixed points. In this talk, we present some iterative methods and related results. Our discussion covers results of classical works of Picard, Mann, Ishikawa, etc. Some recent results based on our published works are also presented. Our discussion also includes application works related to our results.

Keywords: Fixed point, iterative method, Picard iteration, Mann iteration, Ishikawa iteration