



Mathematical Sciences Spring 2024 Colloquium Series



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Friday, March 1 at 3:00pm
Bell Hall 143 and online via Zoom
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Existence of at least one positive solution for a semipositone problem with the s -fractional p -Laplacian operator

Abstract

In recent years, non-local operators as the s -fractional p -Laplacian have gained much attention among mathematicians, engineers and scientists, either for a mathematical interest as well as for its applications. In this talk we aim to show the existence of at least one positive solution for a parameter, semipositone problem that involves this nonlocal operator. We obtained the existence through Mountain Pass Theorem. We also want to highlight the importance of regularity results up to the boundary and a Hopf type lemma obtained in recent years, in order to prove its positivity.

Host: Dr. M. Christina Mariani (mcmariani@utep.edu)

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