

Dr. Yi Zhang, PhD

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Professor and Head Gemai Chen The Department of Mathematical Sciences Xi'an Jiaotong-Liverpool University 111 Ren'ai Road, Suzhou Dushu Lake Science and Education Innovation District Suzhou Industrial Park, Suzhou, China, 215123

Dear Professor and Head Gemai Chen,

I am writing to apply for the Research Associate position posted in the website of The University of Texas at Dallas (UTD). As requested, I am enclosing a cover letter, my unofficial transcripts, curriculum vitae and research statement.

Previously, I was a PhD student of Prof. Manuel Kauers and Prof. Ziming Li. I got my PhD degree from Johannes Kepler University Linz on Feburary, 2017. Now I am working as a postdoc researcher at RICAM with Dr. Christoph Koutschan.

The opportunity posted in the website of UTD is quite interesting for me, and I believe that my education and experience in difference/difference algebra and computer algebra systems (such as Maple, Mathematica) will make me a competitive candidate for this position. I got a Distinguished Student Author Award at ISSAC 2016 for my work on "Contraction of Ore Ideals with Applications". For details, see my curriculum vitae.

Recently, I have joint work with Dr. N. Thieu Vo concerning Laurent series solutions of algebraic ordinary differential equations. There, we utilize both computer algebra and differential algebra to study this problem in an algorithmic way. For the details, please see my research statement. Currently, I am considering two problems concerning symbolic solutions of algebraic differential/difference equations. With your expertise in differential/difference algebra, we may find some common topics in those areas and work together in the future.

Thank you for your time and consideration. I look forward to speaking with you about this employment opportunity.

Sincerely,

Dr. Yi Zhang, PhD