

# Muhammad Zubair Ali Moughal

Assistant Professor

College of Electrical & Mechanical Engineering

**Email:** zubair.moughal@ceme.nust.edu.pk

**Contact:**



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## About

Dr. Muhammad Zubair Ali Moughal is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Muhammad Zubair Ali Moughal has a PhD in Mathematics. Dr. Muhammad Zubair Ali Moughal has published 6 research articles & conference papers having a citation count of 16, carried out 0 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Mathematics</b> University of Waikato , New Zealand	2017 - 2021
<b>MPhil in Mathematics</b> Quaid-i-Azam University , Pakistan	2013 - 2015
<b>MSc in Mathematics</b> Quaid-i-Azam University , Pakistan	2011 - 2013
<b>BSc in Mathematics and Physics</b> University of the Punjab , Pakistan	2008 - 2010

## Experience

<b>Assistant Professor</b> College of Electrical & Mechanical Engineering	2021- Present
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Research Articles

<b>Energy extraction from rotating black hole with quintessential energy through the Penrose process</b> <i>K Q Abbasi F.L. Carneiro Muhammad Zubair Ali Mughal</i> <i>Physics Letters B</i> , Volume:867, Article Number 139592 <b>Impact Factor:</b> 4.500   <b>Quartile:</b> 1 <b>DOI:</b> <a href="https://doi.org/10.1016/j.physletb.2025.139592">https://doi.org/10.1016/j.physletb.2025.139592</a>	2025
<b>Universal thermodynamic topological classes of black holes in perfect fluid dark matter background</b> <i>Muhammad Rizwan Mubasher Jamil Muhammad Zubair Ali Mughal</i> <i>European Physical Journal C</i> , Volume 85, Article Number 359 <b>Impact Factor:</b> 4.200   <b>Quartile:</b> 2   <b>Citations:</b> 1 <b>DOI:</b> 10.1140/epjc/s10052-025-14070-8	2025
<b>Accretion with Back-Reaction onto Cylindrically Symmetric Black Hole with EnergyConditions Analysis</b> <i>Muhammad Zubair Ali Mughal Kamran Qadir Abbasi</i> <i>Chinese Physics C</i> , Volume 49, No. 5, Article Number 055104 <b>Impact Factor:</b> 3.600   <b>Quartile:</b> 1 <b>DOI:</b> <a href="https://doi.org/10.1088/16741137/adb70c">https://doi.org/10.1088/16741137/adb70c</a>	2025
<b>Transition analysis of the non-OT G2 stiff fluid spike solution</b> <i>W C Lim Muhamad Zubair Ali Mughal</i> <i>Classical and Quantum Gravity</i> , Volume 39, Number 2, Article Number 025010 <b>Impact Factor:</b> 3.853   <b>Quartile:</b> 2   <b>Citations:</b> 1 <b>DOI:</b> <a href="https://doi.org/10.1088/1361-6382/ac3b9a">https://doi.org/10.1088/1361-6382/ac3b9a</a>	2021
<b>Cylindrical spikes</b> <i>Muhamad Zubair Ali Mughal W C Lim</i> <i>Classical and Quantum Gravity</i> , Volume 38(7), Article Number 075029 <b>Impact Factor:</b> 3.528   <b>Quartile:</b> 2   <b>Citations:</b> 3 <b>DOI:</b> <a href="https://doi.org/10.1088/1361-6382/abe755">https://doi.org/10.1088/1361-6382/abe755</a>	2021
<b>Charged fermions tunneling from stationary axially symmetric black holes with generalized uncertainty principle</b> <i>Muhammad Rizwan Muhammad Zubair Ali Mughal Ali Övgün</i> <i>Modern Physics Letters A</i> , Volume 34, Issue 23, Article Number 1950184 <b>Impact Factor:</b> 1.391   <b>Quartile:</b> 2   <b>Citations:</b> 11 <b>DOI:</b> 10.1142/S0217732319501840	2019