Jonas Syed
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Email: syed@mpia.de

Curriculum Vitae

Jonas Syed
(he/him)
Date of birth: August 26, 1992
Place of birth: Nürnberg, Germany
Citizenship: German

Education

09/2019 –	Doctoral thesis (Astronomy) Universität Heidelberg/Max-Planck-Institut für Astronomie Study emphasis: Atomic and molecular cloud formation processes Adviser: Prof. Dr. Henrik Beuther
04/2017 – 08/2019	Master of Science (Physics) Universität Heidelberg/Max-Planck-Institut für Astronomie Study emphasis: Astronomy and Astrophysics Master thesis: “HI cloud formation – studying the ISM by means of HI self absorption” Adviser: Prof. Dr. Henrik Beuther
10/2013 – 03/2017	Bachelor of Science (Physics) Universität Heidelberg/Max-Planck-Institut für Astronomie Study emphasis: Astronomy Bachelor thesis: “Temperature and Kinematics of massive star forming clumps” Adviser: Prof. Dr. Henrik Beuther
10/2012 – 09/2013	Bachelor of Science (Physics and Astronomy) Ludwig-Maximilian-Universität München Study emphasis: Astronomy

Professional experience

08/2011 –	Asha – Hoffnung für Bangladesch e.V. Voluntary service as project director and photographer
01/2012 – 06/2012	Informationswerk Nürnberg e.K. Internship graphic design

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Research interests

Physics of the interstellar medium • Early stages of star formation • Magnetic fields • Star formation

Conferences/Schools attended

09/2022	The 7th* Chile-Cologne-Bonn-Symposium: Physics and Chemistry of Star Formation, The Dynamical ISM Across Time and Spatial Scales Puerto Varas, Chile
04/2022	The Early Phase of Star Formation Schloss Ringberg, Germany
07/2021	Ringberg Meeting: Puzzles of Star Formation Schloss Ringberg, Germany
05/2021	ISM 2021 – Structure, characteristic scales, and star formation Beirut, Lebanon (online)
12/2020	Heidelberg-Harvard Physics of Star Formation 2020 Heidelberg, Germany (online)
11/2019	Harvard-Heidelberg Star Formation 2019 Cambridge, MA, USA
07/2019	THOR+friends meeting Berlin, Germany
10/2018	10^{th} IRAM Interferometry School Grenoble, France
11/2016	Physics of Star Formation: Milky Way and Beyond – A Heidelberg-Harvard workshop

Skills

Languages	German: native English: fluent Spanish: basic
IT/Programming	Advanced knowledge in Office, Adobe PS, Adobe AE, Adobe Pr Advanced knowledge in python/CASA (Common Astronomy Software Applications) Basic knowledge in Gildas CLASS (Continuum and Line Analysis Single-dish Software) Basic knowledge in blender Proficient at HTML

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Publications

1st author publications

The "Maggie" filament: Physical properties of a giant atomic cloud [link]
2022, Astronomy & Astrophysics, 657, A1
J. Syed, J. D. Soler, H. Beuther, Y. Wang, S. Suri, J. D. Henshaw, M. Riener, S. Bialy, S. Rezaei Kh., J. M. Stil, P. F. Goldsmith, M. R. Rugel, S. C. O. Glover, R. S. Klessen, J. Kerp, J. S. Urquhart, J. Ott, N. Roy, N. Schneider, R. J. Smith, S. N. Longmore, and H. Linz

Atomic and molecular gas properties during cloud formation [link]
2020, Astronomy & Astrophysics, 642, A68
J. Syed, Y. Wang, H. Beuther, J. D. Soler, M. R. Rugel, J. Ott, A. Brunthaler, J. Kerp, M. Heyer, R. S. Klessen, Th. Henning, S. C. O. Glover, P. F. Goldsmith, H. Linz, J. S. Urquhart, S. E. Ragan, K. G. Johnston, and F. Bigiel

Co-authored publications

Properties of atomic hydrogen gas in the Galactic plane from THOR 21-cm absorption spectra: a comparison with the high latitude gas [link]
2022, MNRAS, in press
A. Basu, N. Roy, H. Beuther, **J. Syed**, J. Ott, J. D. Soler, J. M. Stil, M. R. Rugel

Polarized Emission From Four Supernova Remnants In The THOR Survey [link]
2022, ApJ, in press
R. Shanahan, J. M. Stil, L. Anderson, H. Beuther, P. F. Goldsmith, J. Ott, M. R. Rugel, J. D. Soler, **J. Syed**

On the accuracy of HI observations in molecular clouds -- More cold HI than thought? [link]
2022, MNRAS, 512, 4765
D. Seifried, H. Beuther, S. Walch, **J. Syed**, J. D. Soler, P. Girichidis, and R. Wünsch

Clustered star formation at early evolutionary stages. Physical and chemical analysis of the young star-forming regions ISOSS J22478+6357 and ISOSS J23053+5953 [link]
2022, Astronomy & Astrophysics, 657, A3
C. Gieser, H. Beuther, D. Semenov, S. Suri, J. D. Soler, H. Linz, **J. Syed**, Th. Henning, S. Feng, T. Möller, A. Palau, J. M. Winters, M. T. Beltrán, R. Kuiper, L. Moscadelli, P. Klaassen, J. S. Urquhart, T. Peters, S. N. Longmore, Á. Sánchez-Monge, R. Galván-Madrid, R. Pudritz, and K. G. Johnston

The filamentary structures in the CO emission toward the Milky Way disk [link]
2021, Astronomy & Astrophysics, 651, L4
J. D. Soler, H. Beuther, **J. Syed**, Y. Wang, Th. Henning, S. C. O. Glover, R. S. Klessen, M. C. Sormani, M. Heyer, R. J. Smith, J. S. Urquhart, J. Yang, Y. Su, X. Zhou

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Fragmentation and kinematics in high-mass star formation: CORE-extension targeting two very young high-mass star-forming regions [link]
2021, Astronomy & Astrophysics, 649, A113
H. Beuther, C. Gieser, S. Suri, H. Linz, P. Klaassen, D. Semenov, J. M. Winters, Th. Henning, J. D. Soler, J. S. Urquhart, **J. Syed**, S. Feng, T. Moeller, M. T. Beltran, A. Sanchez-Monge, S. N. Longmore, T. Peters, J. Ballesteros-Paredes, P. Schilke, L. Moscadelli, A. Palau, R. Cesaroni, S. Lumsden, R. Pudritz, F. Wyrowski, R. Kuiper, and A. Ahmadi

The history of dynamics and stellar feedback revealed by the HI filamentary structure in the disk of the Milky Way [link]
2020, Astronomy & Astrophysics, 642, A163
J. D. Soler, H. Beuther, **J. Syed**, Y. Wang, L. D. Anderson, S. C. O. Glover, P. Hennebelle, M. Heyer, Th. Henning, A. F. Izquierdo, R. S. Klessen, H. Linz, N. M. McClure-Griffiths, J. Ott, S. E. Ragan, M. Rugel, N. Schneider, R. J. Smith, M. C. Sormani, J. M. Stil, and J. S. Urquhart