MAHSA KOHANDEL

Curriculum Vitae & Publication List

Education & Research

2016 - 2020 **Ph.D. in Physics**
Scuola Normale Superiore, Pisa, Italy
Thesis title: "Dynamical Properties and Assembly of Galaxies at the Epoch of Reionization"
Supervisor: Prof. Andrea Ferrara

Mar. - Jul. 2018 **Visiting student**
European Southern Observatory (ESO), Munich, Germany
Project title: "The Fate of Giant Star-Forming Clumps at High Redshifts"
PI: Dr. Anita Zanella

2012 – 2014 **M.Sc. in Physics**
Alzahra University, Tehran, Iran
Thesis title: "The Effect of Compact Dimensions on Physical Observables"
Supervisor: Prof. Mohammad Khorrami

2007 - 2012 **B.Sc. in Physics**
Shahid Beheshti University, Tehran, Iran
Thesis title: "Candidates of Dark Energy"
Supervisor: Dr. Nima Khosravi

Awards & Honors

2018 **Research Grant at the European Southern Observatory (ESO), Munich, Germany**

2016 - 2020 **Scholarship for PhD studies, Scuola Normale Superiore, Pisa, Italy**

Peer-Reviewed Publication List

arXiv:2006.09402

[8] Carniani, S. ; Ferrara, A.; Maioliono, R.; Castellano, M.; Gallerani, S.; Fontana, A.; **Kohandel, M**.; Lupi, A.; Pallottini, A.;Pentericci L.; ; Vallini, L. ;Vanzella, E., *"Missing [CII] emission from early galaxies". S*ubmitted to Mon.Not.Roy.Astron.Soc.

[7] **Kohandel, M**.; Pallottini, A.; Ferrara, A.; Carniani, S.; Gallerani, S.; Vallini, L. ; Zanella, A.; Behrens, C., *"Velocity dispersion in the interstellar medium of early galaxies". S*ubmitted to Mon.Not.Roy.Astron.Soc.

arXiv:1907.12136

[6] Zanella, A.; Le Floc'h, E.; Harrison, C. M.; Daddi, E.; Bernhard, E.; Gobat, R.; Strazzullo, V.; Valentino, F.; Cibinel, A.; Sánchez Almeida, J.; **Kohandel, M.**; Fensch, J.; Behrendt, M.; Burkert, A.; Onodera, M.; Bournaud, F.; Scholtz, J., "*A contribution of star-forming clumps and accreting satellites to the mass assembly of* $z \sim 2$ *galaxies"* Mon.Not.Roy.Astron.Soc. 489 (2019) no.2, 2792-2818

arXiv:1908.07536

[5] Ferrara, A.; Vallini, L.; Pallottini, A.; Gallerani, S.; Carniani, S.; **Kohandel, M.**; Decataldo, D.; Behrens, C., *"A physical model for* [CII] *line emission from galaxies",* Mon.Not.Roy.Astron.Soc. 489 (2019) no.1, 1-12

arXiv:1905.11413

[4] **Kohandel, M**.; Pallottini, A.; Ferrara, A.; Zanella, A.; Behrens, C.; Carniani, S.; Gallerani, S.; Vallini, L., *"Kinematics of* $z \geq 6$ *galaxies from* [CII] *line emission",* Mon.Not.Roy.Astron.Soc. 487 (2019) no.3, 3007-3020

arXiv:1905.08254

[3] Pallottini, A.; Ferrara, A.; Decataldo, D.; Gallerani, S.; Vallini, L.; Carniani, S.; Behrens, C.; **Kohandel, M.**; Salvadori, S, "*Deep into the structure of the first galaxies: SERRA views",* Mon.Not.Roy.Astron.Soc. 487 (2019) no.2, 1689-1708

arXiv:1604.06216

[2] Shojai, F.; **Kohandel, M.**; Stepanian, A.; "*On the Relativistic Anisotropic Configurations"*, Eur. Phys. J. C 76, 347 (2016)

arXiv:1502.07211

[1] Shojai, F.; Stepanian A.; **Kohandel, M.**; Fazel, M. "*On the Newtonian Anisotropic Configurations"*, Eur. Phys. J. C 75, 250 (2015)

Proceedings

[1] **Kohandel, M.**; Stepanian, A.; Shojai, F.; "Anisotropic Polytropes In Newtonian Gravity", Proceedings of the 14 Marcel Grossmann Meetings, 2016

[2] Stepanian, A; **Kohandel, M.**; Shojai, F.; "Anisotropic Polytropes In General Relativity" , Proceedings of the 14 Marcel Grossmann Meetings, 2016

Contributed Talks & Presentations

13-17 Jan. 2020	**"The Interstellar medium of high redshift galaxies",** Sexten, Italy
14-18 Oct. 2019	**ALMA2019: Science Results and Cross-Facility synergies,** Cagliari, Italy
2-6 Sep. 2019	**Views on the Interstellar Medium in galaxies in the ALMA era,** Bologna, Italy
24-28 June 2019	**European Week of Astronomy and Space Science(EWASS)**, Lyon, France
3- 28 June 2019	**Zoom-In and Out: From the Interstellar Medium to the Large Scale Structure of the Universe,** Stockholm, Sweden
5-9 Nov. 2018	**Van de Hulst Centennial Symposium: The Interstellar Medium of Galaxies,** Leiden, The Netherlands
12-18 July 2015	**14th Marcel Grossmann Meeting on General Relativity,** Rome, Italy

Attended workshops and schools

9 Apr.- 4 May 2018	**The Interstellar Medium of high Redshift Galaxies,** Munich Institute for Astro- and Particle Physics (MIAPP), Munich, Germany
16-28 July 2017	**CSCS-USI Summer School : Effective High Performance Computing**, Swiss National Supercomputing Centre, Lugano, Switzerland
15- 19 May 2017	**Galaxy Formation and Evolution in a Cosmological Context**, Spetses, Greece
1-3 Jan. 2017	**Quasar Absorption Lines workshop**, IPM, Tehran, Iran

Computer skills

Programming language with substantial experience: **Python**
Operating systems: **Mac OS X, Linux, MS Windows**
Astrophysical/Cosmological simulation codes: **RAMSES**
Astronomical data software: **CASA, DS9**
Scientific computing software: **Mathematica**
Productivity software: **LaTeX, MS Office**

Languages

English (Full Professional Proficiency), **Italian** (Intermediate), **Persian** (Native), **Azeri** (Mother tongue),