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PUBLICATIONS

1. *Predictions for the relation between strong HI absorbers and galaxies at $z = 3$*
Alireza Rahmati & Joop Schaye
2013, MNRAS, to be submitted.
2. *The effect of recombination radiation on the temperature and ionization state of partially ionized gas*
Milan Raičević, Andreas H. Pawlik, Joop Schaye & Alireza Rahmati
2013, MNRAS, submitted.
3. *Stars were born in significantly denser regions in the early Universe*
Maryam Shirazi, Jarle Brinchmann & Alireza Rahmati
2013, ApJ, submitted, [arXiv:1307.4758](https://arxiv.org/abs/1307.4758).
4. *The impact of local stellar radiation on the HI column density distribution*
Alireza Rahmati, Joop Schaye, Andreas H. Pawlik & Milan Raičević
2013, MNRAS, 431, 2261-2277.
5. *On the evolution of the HI column density distribution in cosmological simulations*
Alireza Rahmati, Andreas H. Pawlik, Milan Raičević & Joop Schaye
2013, MNRAS, 430, 2427-2445.
6. *Genesis of the dusty Universe: modeling submillimetre source counts*
Alireza Rahmati & Paul van der Werf
2011, MNRAS, 418, 176-194.
7. *New biorthogonal potential–density basis functions*
Alireza Rahmati & Mir Abbas Jalali
2009, MNRAS, 393, 1459-1466.

CURRICULUM VITAE

I was born on 9 February 1982 in Qom, Iran. When I was two years old, I started to taste academic life as my father started his undergraduate studies in Shiraz University. This was the beginning of moving to different parts of the country. I grew up in Qom, Shiraz, Tehran and Yazd, and I went to several different schools in those cities.

In September 2000, I received my pre-university diploma in physics and mathematics from one of the branches of the *National Organization for Development of Exceptional Talents* (NODET) in Yazd, Iran, and started my Physics undergraduate studies at *Amir Kabir University of Technology* (Tehran Polytechnic) in Tehran, Iran. For my B.Sc. thesis, I worked with Prof. dr. B. Maragechi on studying the self-field effects in the dispersion relation of relativistic electron beams. After a very successful performance in national graduate entrance examinations, which brought me the exemption from compulsory military service, I started my Physics graduate studies in September 2004, at *Sharif University of Technology* in Tehran, Iran. For my M.Sc. thesis, I worked with Prof. dr. M. A. Jalali on instabilities of elliptical galaxies, which resulted in my first scientific publication. After finishing my M.Sc. degree in 2006, I was planning to pursue my studies as a Ph.D. student in the US. However, as an Iranian, I was denied a student visa to enter the US and to benefit from my awarded fellowship at Northwestern University. A year later, in September 2007, I started at *Leiden Observatory* as a M.Sc. student, thanks to the Oort and Huygens scholarships. For my minor project, I worked with Prof. dr. M. Franx before starting my M.Sc. thesis with Prof. dr. P. van der Werf on modeling the evolution of dusty galaxies. I graduated cum laude and I decided to stay at Leiden Observatory for my Ph.D., and to work with Prof. dr. Schaye by joining his research group in September 2009.

During my Ph.D., I have presented my work in several institutes and international conferences in Aix-en-Provence (France), Barcelona (Spain), Cambridge, Durham and Edinburgh (UK), Groningen, Dwingeloo (Netherlands), Garching and Heidelberg (Germany), Trieste (Italy), Zurich (Switzerland), Austin, Berkeley, Madison, Santa Barbara, Santa Cruz and San Diego (US).

After a brief working visit at CONICET, Universidad de Buenos Aires (Argentina) in September 2013, I will continue to live my long-standing dream of being an astrophysicist by starting a postdoctoral fellowship at the Max-Planck Institute for Astrophysics (Garching, Germany), in October 2013.

