The Impact of neutral hydrogen on the current evolution of early-type galaxies

Yildiz, Mustafa

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2017

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.
It was my dream to be a scientist. I was just 13 years old boy when I read about the universe in a popular-science magazine for kids. Then, I decided to be an astronomer! After a spectacular journey in the Kapteyn Astronomical Institute in the Netherlands, my dream has come true! Therefore, I am deeply grateful to Dr. Paolo Serra who offered me the opportunity to come to Groningen to work on a fantastic Ph.D. project at the Kapteyn Astronomical Institute. Paolo, firstly thank you for guiding me through the entire journey of 4.5 years. You were always patient with me, even if I asked the same question over and over again, you found a way to explain the answer in different ways! After you had left to Australia, you did not stop supporting me and giving advice through video conferences, e-mails, and even telephone. We had one meeting on the phone since my internet connection was super bad. I remember once we had almost a whole day telecon, you and I were working our stuff but not shutting the connection down. In that day, some friends came for a coffee, then for lunch and then for another coffee, but I was still on the telecon! They said that I could create some problems in your family since it was night time in Sydney! At this point, I would like to thank Mirjam and your beautiful family for allowing us to have many telecons in the middle of your night. I also would like to thank you and your family for hosting me in Sydney, which is one of my favourite places in the world.

I have been incredibly fortunate to have not just one but two great supervisors. I would like to thank Prof. Reynier Peletier for the support and having me one of his PhD students. I feel privileged to be one of your PhD students. First of all, you also introduced me to Paolo, so thanks to you I could come to the Netherlands. Reynier, I would like to thank you particularly due to your last patient! We had many discussions, and I was often saying that I was right. Having had heated arguments, all those arguments turned out that you were right! Therefore, I learnt a lot from you in the last four years.

Never stop dreaming!
I would like to thank my collaborators, Prof. Tom Oosterloo and Prof. Raffaella Morganti from the ASTRON for their advice and support. Tom, thank you very much for explaining important points in radio data reduction that I struggled to understand. I will always remember that you were saying that “I have only a couple of minutes” and, then, giving me half an hour lecture! Raffaella, you were always smiling and positive. I would like to thank both of you very much for all the discussions that I learnt a lot. I also would like to thank another collaborator from Paris, who is Pierre-Alain Duc for being one of the co-authors in all scientific chapters in this Ph.D. thesis. You always tried to help me with your comments and good opinions. You did not hesitate to share your data, knowledge and experience with me. Thank you very much for all the support and discussions. I wish you good luck with your new position as the director of Strasbourg Astronomical Observatory. I also thank John, Vibor, and Leith for driving me to the ASTRON, and it was nice to chat with you on the way.

I am grateful for the help to secretaries and computer group at the Kapteyn Institute: Hennie, Lucia, Christa, Martine, Martin and Wim. Thanks for your work and for making the institute a practical place. I am also grateful to secretaries and people in Australia (Vicki, Leanne, Jayde, and Nathan) for always being smiley and friendly and for helping me during my stay in Sydney. I would like to thank Prof. Bärbel Koribalski for letting me join her group while I was in Sydney, and for being so kind and taking me bush walks together with her family at the weekend.

I would like to thank Prof. Thijs van der Hulst and Prof. Marc Verheijen for arranging weekly HI group meetings at Kapteyn Institute that I learnt lots of radio astronomy in these sessions. Other thanks go to Reynier and Prof. Scott Trager for organising optical group meetings. I also thank people who were attending these meetings for sharing their results, listening each other, and giving valuable advice.

I thank to my past and current office-mates (Nadine, Veronique, Ming, Robin, Caroline, and Pooja) for making our office a peaceful working environment. Room 277 always had friendly discussions from different cultures. Nadine, although you are in a different place (because I was too noisy!), I wish you good luck with the rest of your Ph.D.. Ming and Caroline, you finished your Ph.D. projects and left, so I wish you good luck for the future! Robin, you did an amazing job and translate my summary to Dutch! Thanks for doing this even if you are sick in bed with the flu! I think you also changed you room, so be happy in your new room and good luck with the rest of your PhD!

I have spent almost four years in the beautiful city Groningen! It was almost perfect for being in this town and the Kapteyn Astronomical Institute. I have met many people that changed or altered my perspective and thoughts. I have obtained and shared a lot of things due to the multi-cultural structure of the institute. Besides, finishing Ph.D. is not an easy job without the help of people
around you when you need some distraction. That is why I would like to thank all the professors, postdocs, and Ph.D. students that make Kapteyn a lively place and giving support when it is needed. Being a member of the Kapteyn Astronomical Institute was priceless!

Katinka, my friend, it was nice to spend time (almost two years) with you, and I still remember that you did a pole dance trick in the middle of Paris by using a streetlight! Federico, thank you for encouraging advice when I started my Ph.D., and also the thesis style format!

D&D fellows! Although some people think this game is a boring nerd game, I have enjoyed a lot during the sessions. For the first group: Ajinkya, Giacomo, and Stefano (maybe we discussed more politics than the game!), and for the second and long-term group: Wouter, Antonino, Laura, Davide, Nadine, this Paladin will not forget you and the amazing times spent with you. Wouter, thank you for taking me from the Airport in the middle of the night and letting me stay at your home between boxes (I was the first guest in your new house!). Antonino and Laura, thank you very much for sharing your food and coffee, it was nice to go dinner with you, guys!

Sarvesh, Sampath, Bharat, and crazy Saikat thank you for bringing Indian desserts and the spicy food! Aku, thank you for sharing your codes and helping me with masking nasty stars and galaxies in my images! It was also fun to go around with you in Toledo! Pecce, it is always nice to have a person who speaks almost perfect Turkish as a foreign language! I wish you good luck in the future in the Netherlands. Khan, thank you for civil philosophical discussions while biking home after work! Abhik, Mpati, Kelley, Evandro, Shoko, Mariya, Hao, Aaron, Giorgis, Leon, Eva, Lorenzo, Elaheh thank you all for the nice conversations during the coffee-break, lunch-time, and happy-hour, particularly, when it was sunny!

I am afraid the official language of the institute might change to Italian in the future because there are many Italians! I had excellent time (actually most of my time), and I have learnt a lot from my Italian friends. I can, now, speak a little bit Italian too. Filippo, thank you for driving me many times to Dwingeloo and making me listen to Pink Floyd in your car (now I am listening to them!). Davide, my dear friend, I love the way you are speaking and your Romanesco dialect, and special thanks go to you since you taught me essential Italian words and phrases, especially this one: “omo de panza, omo de sostanza”!!! Davide (Massari), Cristiana, Crescenzo thank you for the nice chats about Italian culture and almost everything and your friendship. Enrico, thank you very much for giving your room in the last September, and also being a wonderful friend! It was nice to go out with you and talk about movies and politics. By the way, I am grateful to Giovanni and Giulia for sharing their house with me. However, I believe you should still kneel and ask forgiveness from that “toy” because of your wifi password!! Katya special thanks go to you
since you are a very kind and friendly person, and also for the pink elephant, Gökay still plays with it!

Yiannis (old smoking fellow!) and Alice, it was always nice to discuss which one is correct: Turkish or Greek coffee! Also thanks for the delicious moussaka (I do not care if it is Turkish or Greek!). We have many in common, and the time I spent with you was amazing. I hope everything will be as you wish! Manolis, my dear half Greek, half Italian (and maybe half American) friend! It was great to have you as a friend. Thanks for all the discussions about politics, science and so many other things, also going lunches at the weekend, and going ACLO together! Whenever I had a question and needed a quick answer, you were there for me (and for many people in the institute!). Now, I would like to thank Mary, who became a great friend not only for me but also for my wife, Tuba. Mary, you are definitely the most positive and optimistic person I have ever known. I wish you two have a wonderful future full of happiness.

Anastasia, my beautiful Russian friend, and another old smoking fellow! We have started to discuss many things from the day first! Our discussions were long (maybe because both of us are talkative people!) and sometimes frustrating (after some time your voice becomes more ... ear-catching!), but I always enjoyed chatting with you. Tuba and I are happy to have a friend like you. We are always ready to make a Turkish coffee for you! I wish the best for you in the future in the Netherlands.

Marisa, you are a unique person. You were always listening to me, and giving valuable comments. You became a really good friend for Tuba and me. I still remember that you were more nervous than me while we were going to the hospital for Gökay’s birth! You stayed at the Hospital for more than 12 hours, and you are the first friend who saw baby Gökay! Thank you (together with Francesco) for giving me fantastic Italian food. Tuba still crave for that Italian food that your father brought for us! Many, many thanks go to you for sharing many things in the last three years.

Francesco (another old smoker fellow!), buddy!, it was incredible to have you as a friend, and you are one of the best friends I have ever had. You were always there to listen to me with patience in the hard days. It was incredible to go around and have fun in Munich with you! I cannot help but laugh whenever I remember the things happened in Munich! We discussed a lot about life and philosophy, and shared many things: we smoked, we went out, we went to the cinema together, and many more things. You also stayed at the hospital the day when Gökay was born, and you stayed mostly in the waiting room eating the fantastic(!) food of the hospital (while Marisa, and my sister were waiting in the delivery room :p). Thank very much for everything my friend!

I am sure that I forgot someone to thank in these five pages of Acknowledgements, but please forgive me for this! However, I do remember my Turkish friends! Esra, thank you for sharing your knowledge about the bursary. Şeyda, thank you for the nice conversations, and I hope you will enjoy your time in
Groningen. Tuba, that was nice to meet you here, and I wish you good luck in your future in Turkey. Burcu, thanks for all the discussions about Turkish politics, science, and everything. You did not hesitate to help me when I needed it. Ayçin, you helped me a lot when I came to the Netherlands. Thank you for arranging the first place I stayed and showing around the town. By the way, you still need to cook for me! Umut, I am grateful that I had known you before I came to the Netherlands you helped me a lot. Seyit, I am not sure how to thank you! I cannot write everything you did. I just thank you for being there, whenever I needed help. I owe you so much! I would also like to thank another Turkish person Dr. Ferhat Fikri Özeren, who is my former supervisor, for encouraging me to go abroad and introducing me Reynier more than five years ago! I also thank the crew of Ozan Doner (Murat & Sara) for their warm friendship and providing delicious Turkish Doner and Kapsalon!

Anneme, Babama, kardeşime ve tüm Aileme bana verdiği maddi ve manevi her türlü destekten ötürü çok teşekkür ederim. Başı biricik ablam, göstermiş olduğun smursuz sevgiden, her ne kadar yasaş olursam olayın hiç bitmeyen güldüsemenden ve sabrından ötürü en çok sana teşekkür ederim! Seni çok seviyorum! Binlerce kilometre uzakta da olsam beni yahuz bırakmaya uzun süredir arkadaş olduğum kardeşlerime ayrıca teşekkür ediyorum. Erciyes Üniversitesinde çalışan başta bölüm başkanımız Prof. İbrahim Küçük olmak üzere tüm hocalarımı ve arkadaşlarımı, bana ve aileme gösterdikleri ilgiden dolayı çok teşekkür ederim. Son olarak, Yüksek Öğretim Kurumun ve Erciyes Üniversitesine, yukarıda yazılanların gerçekleşmesi için bana verdikleri burs ve destek için teşekkür ederim.

Finally, I would like to give the biggest thanks to my wife! Tuba, you are the one who suffered most during the last nine years. First, you married a guy who obsessed with astronomy and has no job! You also had to wait almost two years in Kayseri when I was in Groningen. But, you never stop supporting and loving me! When you were in Groningen, the days were more sunny and warm. I cannot express my feelings with words, when you are with me. You gave me the most amazing gift in this world, our baby! Thank you very much for being my wife and mother of our son!