

# Jeffrey Chi Chung Chan

---

Room 2213, Pierce Hall, University of California, Riverside  
900 University Avenue, Riverside, CA 92521, USA  
jchan@ucr.edu

## RESEARCH INTEREST

Galaxy Evolution  
Massive Galaxies  
Galaxy Clusters

## EMPLOYMENT

2017 - **University of California, Riverside – Postdoctoral Researcher**  
Present Research Focus: The properties of galaxies in high-redshift galaxy clusters  
Active member of GOGREEN, SpARCS, and KMOS-cluster surveys

## EDUCATION

2012 - 2016 **Max Planck Institute for Extraterrestrial Physics (MPE) / Ludwig-Maximilian University of Munich (LMU) – Dr. rer. nat. in Astronomy (Magna Cum Laude)**  
Dissertation: “Constraining the formation and evolution of cluster galaxies at  $z \sim 1.5$  using sizes and colour gradients”

2010 - 2012 **The University of Hong Kong (HKU) – M.Phil. in Astrophysics**  
Dissertation: “Kinematics Constraints on Structuring of the Optical Emission-Line Nebula in NGC 1275”

2007 - 2010 **The University of Hong Kong (HKU) – B.Sc. (First Class Honours)**  
(Major in Mathematics/Physics, Minor in Astronomy)  
Final year bachelor research project: “Coronal Magnetic Activity at the divide between partially and full convective stars”  
Research project: “Measuring the Proper motion of the debris of SN1987A”

## AWARDS, SCHOLARSHIPS AND STUDENTSHIPS

2015 – 2016 Ph.D. Studentship (Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR grant))  
2012 – 2015 Ph.D. Studentship (MPE)  
2010 - 2012 Postgraduate Studentship (HKU)  
2010 Best Presenter in Undergraduate Research Colloquium  
2009 Li Po Kwai Scholarship  
2008 Dean’s Honours List  
2007 HKU Foundation Entrance Scholarship

## TEACHING AND OUTREACH EXPERIENCE

- 2017 Helper for the total solar eclipse outreach event at UCR
- 2014 Demonstrator at Open day at MPE
- 2010 - 2012 Tutor of PHYS2022 “Observational Astronomy” and PHYS1414 “General Physics I” (HKU)
- 2008 Aug Organizer of the Physics Summer Workshop 2008 for High School students
- 2007 - 2008 Internal Vice Chairperson of Physics Society (HKU)
- 2007 - 2009 Tutor of junior high school students (Mathematics class, Kumon Hong Kong Co. Ltd.)

## OBSERVATION EXPERIENCE

### **GMOS, Gemini Observatory North - Slit Spectroscopy of galaxies in high-z clusters**

2017 Apr Run 2017A – 5 nights

### **VLT/KMOS, Paranal Observatory - IFU Observation of ETGs in high-z clusters**

2015 Sep Observing Runs 095.A-0137(A) – 3 nights

2014 Oct Observing Runs 094.A-0578(A) – 4 nights

2014 Jul Observing Runs 093.A-0051(B) – 7 nights

## CONFERENCE PRESENTATIONS AND SEMINARS

- 2018 Nov **“The evolution of the cluster red sequence at  $z\sim 1$ ”** (seminar) Astronomy seminar, UCR, Riverside
- 2017 Jul **“The buildup and structural evolution of the cluster red sequence between redshift  $z\sim 1-1.5$ ”** (contributed talk) “Early stages of Galaxy Cluster Formation (GCF2017)” conference, ESO Garching, Germany
- 2016 Aug **“KMOS-Cluster Survey - Size, Colour gradients and Resolved Stellar Mass Distribution of Cluster Galaxies at  $z\sim 1.5$ ”** (contributed talk) “Deconstructing Galaxies at Cosmic Noon: The Present and Future of Deep Spectroscopic Surveys at High Redshift” conference, Leiden, The Netherlands
- 2015 Sep **“KMOS-Cluster - The Fundamental Plane and Resolved Stellar Mass Distribution of Cluster Galaxies at  $z\sim 1.5$ ”** (contributed talk) “In the footsteps of galaxies: tracing the evolution of environmental effects” conference, Soverato, Italy
- 2015 Jul **“Color gradients in Early-type galaxies”** (seminar) IMPRS student seminar, MPE, Garching, Germany
- 2015 Jul **“KMOS-Cluster Program - The Fundamental Plane and Resolved Stellar Mass Distribution of Cluster Galaxies at  $z\sim 1.5$ ”** (poster presentation) “A 3D View on Galaxy Evolution: from Statistics to Physics” conference, Max Planck Institute for Astronomy (MPIA), Heidelberg,

|          |   |  |
|----------|---|--|
|          |   | Germany  |
| 2015 Jun | <b>“KMOS-Cluster - Size, Color gradients and Resolved Stellar Mass Distributions of the Massive Cluster Galaxies at <math>z \sim 1.39</math>”</b><br>(contributed talk)   | European Week of Astronomy and Space Science (EWASS 2015) conference, La Laguna, Tenerife, Spain       |
| 2015 Apr | <b>“KMOS-Cluster - Size and Resolved Stellar Mass Distribution of Cluster Galaxies at <math>z \sim 1.4</math>”</b> (talk)   | OPINAS Group retreat, Ringberg, Tegernsee, Germany   |
| 2015 Mar | <b>“Size and Resolved Stellar Mass Distribution of Cluster Galaxies at <math>z \sim 1.4</math>”</b><br>(seminar)  | OPINAS seminar, MPE, Garching, Germany   |
| 2014 Jun | <b>“Velocity Dispersion and Resolved Stellar Mass Distribution of Cluster Galaxies at <math>1 &lt; z &lt; 2</math> - Current Status and Preliminary Results from the KMOS-clusters Program”</b><br>(contributed talk) | “Future direction in Galaxy Cluster Surveys” conference, École normale supérieure (ENS), Paris, France |
| 2014 Feb | <b>“Sizes and Stellar Mass Structure of KMOS-Cluster Galaxies”</b> (talk)   | OPINAS Group retreat, Ringberg, Tegernsee, Germany   |
| 2013 Apr | <b>“Kinematic Constraints on Structuring of the Optical Emission-Line Nebula in NGC 1275”</b> (seminar)   | OPINAS seminar, MPE, Garching, Germany   |
| 2012 Aug | <b>“Clues on how the optical nebula in NGC 1275 may be structured from its velocity field”</b> (contributed talk)   | IAU XXVIII General Assembly, Beijing, China  |

## WORKSHOPS AND SUMMER SCHOOLS

|          |  |   |
|----------|--|---|
| 2019 Aug | GOGREEN 2019 workshop  | York University, Canada   |
| 2018 Aug | GOGREEN 2018 workshop  | University of Waterloo, Ontario, Canada                                     |
| 2017 Feb | GOGREEN 2017 workshop  | The University of Kansas, Lawrence, USA                                     |
| 2015 Dec | KMOS Cluster Workshop 4  | MPE, Garching, Germany  |
| 2015 Jun | KMOS Cluster Workshop 3  | University of Oxford, Oxford, UK  |
| 2014 Nov | KMOS Cluster Workshop 2  | MPE, Garching, Germany  |
| 2013 Feb | KMOS Cluster Workshop 1  | University of Oxford, Oxford, UK  |
| 2011 Nov | The Hong Kong Workshop on Evolved Stars and Astrophysical Maser  | The University of Hong Kong, Hong Kong                                      |
| 2011 Jun | Star Formation Summer School                                     | The Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), Taiwan |
| 2011 Jun | Star Formation through Spectroimaging at High Angular Resolution | The Academia Sinica Institute of Astronomy and Astrophysics                 |

(ASIAA), Taiwan

## **SKILLS**

Language: Fluent in English, Cantonese, Fair in Mandarin

Computer:

- Programming and software development - IDL, Python, C++, VB, JS
- Data analysis software - IRAF, Miriad, AIPS, ds9, QFitsView, E3D, p3d etc.
- Web authoring and design – Node.js, Flask, Adobe Photoshop

## **REFERENCES**

Prof. Gillian Wilson (UCR)

[gillianw@ucr.edu](mailto:gillianw@ucr.edu)

Group leader

Prof. Michael Balogh (U. of Waterloo)

[mbalogh@uwaterloo.ca](mailto:mbalogh@uwaterloo.ca)

P.I. of GOGREEN survey

Dr. Roberto Saglia (MPE)

[saglia@mpe.mpg.de](mailto:saglia@mpe.mpg.de)

Ph.D. Supervisor