# Supermassive Black holes Environment & Evolution, Corfu 19-22 June 2019 (Venue Rectory House, Ionian University)

# **Programme**

# **Tuesday**

18.00-20.00 Registration 20.00-21.00 Welcome Reception

# Wednesday (AGN demographics and evolution)

# Chair - A. Comastri

08.15-08.45 Registration

08.45-09.00 Introductory Talk

09.00-09.25 J. Aird (Review) - The demographics and evolution of AGN from multiwavelength surveys

09.25-09.40 T. Ananna – The Stripe 82 survey

09.40-09.55 J. Buchner - What makes clumpy obscuration and X-ray occultation events?

 $09.55\text{-}10.10~\mathrm{M}$ . Jones - A universal mode of BH accretion uncovering AGN in the Cosmic X-ray background

10.10-10.25 T. Kawamuro - A Chandra and ALMA Study of X-ray-irradiated Gas in the Central ~100 pc of the Circinus Galaxy

10.25-10.40 U. Banik - Constraining the mass density of free-floating black holes using razor-thin lensing arcs

## 10.40-11.00 Coffee Break

11.00-11.20 E. Giallongo (Invited) The Space Densities and UV emissivities of AGN at z>4

11.20-11.35 I. Zaw - A Uniformly Selected, All-Sky, Optical AGN Catalog

11.35-11.50 L. Zappacosta - The realm of hyperluminous quasars

11.50-12.05 R. Pfeifle - New Results from Chandra: The Incidence of Dual AGNs in Mergers

12.05-12.20 Y. Diaz - Constraining X-ray reflection in the low luminosity AGN NGC3718 with NuSTAR and XMM- Newton

12.20-12.35 P. Rodriguez Hidalgo - (Extremely!) High Velocity Outflows

## 12.35-13.00 SHORT CONTRIBUTIONS

D. Xu - SBS 1411+533: a New "Changing-look" Quasar with a "Turn-on" Transition

L. Alegre - Classification of radio sources with LOFAR

J Cann - The Hunt for Intermediate Mass Black Holes in the JWST Era

#### 13.00-14.00 LUNCH BREAK

## Chair – T.J. Turner

14.00-14.25 G. Lanzuisi (review) The COSMOS survey

14.25-14.40 K. Ichikawa - IR View of X-ray AGN: The Covering Factor of Gas and Dust in Swift/BAT AGN

14.40-14.55 K. Birchall - X-ray Selected AGN in Dwarf Galaxies

14.55-15.10 C. Carroll – An extreme population of heavily obscured AGN

15.10-15.25 S. Amarantidis - The first Super Massive Black Holes: indications from models for future observations

15.25-15.45 D. Alexander (Solicited) – AGN activity in our cosmic backyard: obscuration and identification challenges

## 15.45-16.10 Coffee Break

16.10-16.30 C. Ricci (Solicited) - Galaxy mergers and obscured black hole growth, an hard X-ray view

- 16.30-16.45 C. Vignali The X-ray view of the Jackpot Nebula at z=2: an amazing source overdensity and extended emission revealed in X-rays
- 16.45-17.00 Y. Toba Physical properties of luminous radio galaxies at  $0 \le z \le 1.7$  selected with Subaru Hyper Suprime-Cam and VLA FIRST survey
- 17.00-17.15 R. Arcodia Testing the disk-corona interplay in radiatively-efficient broad-line AGN
- 17.15-17.30 G. Risaliti Quasars as standard candles
- 17.40-17.45 A. Masini The Chandra Deep Wide Field Survey: pushing deeper the central 6 deg^2 of the Bootes field
- 17.45-18.00 E. Pouliasis Robust Identification of AGN through HST Optical Variability in
- GOODS- S: Comparison with the X-ray and mid-IR Selected Samples

# 17.50-18.20 SHORT CONTRIBUTIONS

- T. Mufakharov Multifrequency study of the GPS-sources
- S. Belladitta An extremely X-ray weak blazar at z=5.0
- L. Ge Bayesian Hierarchical Method of AGN X-ray Spectral Fitting
- C. Spencer Measuring Black Hole Masses in Active Galactic Nuclei from Time Resolved Observations with the 1m Nickel Telescope of Lick Observatory
- Y. Bhulla -

# Thursday (AGN environment)

# Chair- F. Nicastro

- 09.00-09.25 V. Allevato (review) The interplay between SMBHs and the large-scale structure of the Universe
- 09.25-09.45 N. Schartel (solicited) 20 years of XMM: The contribution of XMM Newton to the study of AGN
- 09.45-10.00 G. Mountrichas The dependence of the X-ray AGN clustering on the properties of the host galaxy
- 10.00-10.15 E. Iani Inquiring into the nature of the Abell 2667 brightest cluster galaxy'
- 10.15-10.30 C. Villforth Fuelling AGN the impact of mergers on luminous unobscured AGN and reddened AGN with powerful outflows
- 10.30-10.45 K. Mehrgan The dynamical imprint of a 40-billion-solar-mass supermassive Black Hole in Holm15A

#### 10.45-11.05 Coffee Break

- 11.05-11.25 M. Powell (invited) Clustering of Hard X-ray-selected AGN
- 11.25-11.40 G. Vergara Clustering of galaxies around z~4 quasars
- 11.40-11.55 C. Wethers Testing the Evolutionary Picture of LoBALs: Star Formation Rates and Environments.
- 11.55-12.10 E. Koulouridis X-ray AGN in galaxy clusters
- 12.10-12.25 B. Davis Black Hole Mass Scaling Relations for Spiral Galaxies
- 12.25-12.40 C. Marsden Towards creating robust AGN mock catalogue

## 12.40-13.00 Short Contributions

- Z. Chen Size and Structure Evolution of Massive Galaxies Over 0.5<z<2.5
- V. Mahatma Spectral Ageing in powerful radio galaxies
- A. Viitanen
- S. Ciprini The binary supermassive black hole conjecture for two jetted gamma-ray blazars

# 13.00-14.00 LUNCH BREAK

# Chair - V. Allevato

- 14.00-14.25 F. Nicastro (review) The Universe's Missing Baryon Mass
- 14.25-14.45 M. Hirschmann (solicited) Co-evolution of galaxies & black holes: New insights from cosmological, hydrodynamical simulations

- 14.45-15.00 D. Angles-Alcazar Cosmological hyper-refinement simulations of AGN fueling and feedback
- 15.00-15.15 J. Kotilainen Black hole galaxy co-evolution at high-z
- 15.15-15.30 O. Catmabacak Effect of early environment and mergers on SMBH growth in FIRE simulations
- 15.30-15.45 G. Khorunzhev X-ray Luminosity Function of Quasars at 3<z<5 from the XMM-Newton Serendipitous Survey. Search for optically bright quasars at z>5.5

## 15.45-16.10 Coffee break

- 16.10-16.30 D. Kocevski (Solicited) Elevated Black Hole Growth in the Progenitors of Compact Quiescent Galaxies at z=2
- 16.30-16.45 C. Mazzuchelli The Environments of z~6 QSOs: a Multiwavelength Perspective
- 16.45-17.00 L. Bassini Black hole mass and cluster mass correlation in cosmological hydrodynamical simulations
- 17.00-17.15 V. Marian The connection between major mergers and high-accretion AGNs at z~2
- 17.15-17.30 A. Efthymiadou The influence of galaxy mergers on the star formation history of luminous AGN
- 17.30-17.45 L. Fan Multiwavelength view of hyperluminous dust-obscured quasars at cosmic noon
- 17.45-18.00 A. Peca Obscured AGN in the field of J1030+0524: the X-ray and optical/infrared perspective

# 18.00-18.30 Short contributions

- Z. Ghaffari Evolution of galaxy overdensities around 3C radio galaxies and quasars at 1<z<2.5
- H. Mishra Active galactic nuclei fraction in X-ray selected clusters and fields from z=0-0.5: AGN activity dependence on environment and redshift
- M.B. Stone Observational studies of low-redshift AGN environments and high-redshift AGN-host co-evolution
- K. Whalen Finding the First Quasars with JWST, Euclid and WFIRST
- S. Sonkamble Supermassive black holes in the peculiar galaxy cluster Abell 2626
- M. Lazarova Are LoBAL QSOs short-lived, sporadic episodes of AGN activity?

# Friday (Feedback, Black Hole growth in the context of galaxy evolution)

## Chair – D. Alexander

- 09.00-09.25 C. Harrison (review) Relating SMBH growth with galaxy evolution
- 09.25-09.40 R. Carraro Co-evolution of black hole accretion and star formation in galaxies
- 09.40-09.55 W. V. Yan Chandra Observations of the Extended Fe Kalpha Line in galaxies with High SFR
- 09.55-10.10 R. Weinberger Feedback from active galactic nuclei in galaxy and galaxy cluster evolution lessons learned from simulations
- 10.10-10.25 K. Hall Probing quasar feedback with the Sunyaev-Zel'dovich Effect

# 10.25-10.45 Coffee

- 10.45-11.05 T.J. Turner (Solicited) An occultation event in NGC 3227
- 11.05-11.20 E. Nardini Towards an informed guest of guasar accretion disc winds
- 11.20 -11.35 Y. Guo Extended metal line emissions around quasars at z~3 and implications for galaxy feedback
- 11.35-11.50 R. Alexandroff Multi-wavelength studies of feedback processes in extremely red quasars
- 11.50-12.05 M. Bischetti The gentle monster PDS456 seen by ALMA: the galaxy-scale molecular outflow and its implication for AGN feedback

 $12.05-12.20\,$  R. Gilli - Galaxy formation promoted by large scale AGN feedback in a protocluster at  $z=1.69\,$ 

12.20-12.35 F. Duras - Expanding our knowledge of the AGN/galaxy coevolution through the widest dynamical range ever

## 12.35-13.00 Short Contributions

B. Avramov - Dynamical Interaction and Energy Exchange of Stars with a Massive Black Hole Binary

I Katkov - Optical and radio view on the two AGN-driven outflow galaxies

K A Cutiva - A possible correlation between the BLR and star formation rate in AGNs

I Palit - Effects of adiabatic index on the sonic surface and time variability of low angular momentum accretion flows

#### 13.00-14.00 LUNCH BREAK

#### Chair – M. Brusa

14.00-14.25 R. Schneider (Invited) – To grow or not to grow: constraints on early black hole formation

14.25-14.40 M. Bourne - AGN jet feedback in realistic cluster environments

14.40-14.55 E. Choi - Metal in winds: the chemical enrichment by AGN-driven galactic outflows

14.55-15.10 A. Ferre-Mateu - Do massive relic galaxies challenge the SMBH-galaxy coevolution?

15.10-15.25 A. Fluetsch - Ionised gas outflow in local ULIRGs with MUSE: Outflows and Positive Feedback

## **15.25-15.45** Coffee Break

15.45-16.00 V. Bennert - Measuring BH masses and calibrating the BH-mass scaling relations

16.00-16.15 L. Grimmett - Revealing the differences in the SMBH accretion rate distributions of staburst and non starburst galaxies

16.15-16.30 A. Bongiorno - The role of AGN activity in the building up of the BCG of the most massive galaxy cluster at z=1.6

16.30-16.45 C. Feruglio - AGN feeding & feedback in 3D

16.45-17.00 E. Bernhard - The distribution of AGN host SFR: more powerful AGNs typically reside in more MS- like star-forming galaxies

17.00-17.15 M. Ginolfi - Exploring AGN-feedback on circumgalactic scales with MUSE

17.15-17.30 V. Masoura - The dependence of star formation on AGN activity

17.30-17.45 F. Muller-Sanchez - Feeding and Feedback in Dual Active Galactic Nuclei

## 17.45-18.15 Short Contributions

D. May - The striking resemblance between the outflows of NGC 4151 and NGC 1068

A. Travascio - Evidence of outflowing CGM: broad Lya and CIV extended emissions around an hyper-luminous quasar

A. Robleto-Orus - A MUSE study of the Seyfert 1 NGC7469: spatially resolved star-formation and AGN-driven winds

D. Sanmartim - Analysis of feedback and its impact on star formation in nearby post-starbursts quasars

# **SATURDAY (Large Surveys & missions (solicited talks session))**

# Chair – G. Risaliti

09.00- 09.25 A. Comastri (Ending Review Talk) - Future SMBH surveys

09.25- 09.45 A. Georgakakis eROSITA

09.45-10.05 M. Plionis The XMM/XXL survey legacy

# **High Redshift Universe**

10.05-10.25 D. Whalen (solicited) - Finding the First Quasars with JWST, Euclid and WFIRST

10.25-10.45 R. Decarli (invited)

#### **10.45-11.10** Coffee break

- 11.10-11.25 F. Vito (solicited) The X-ray properties of z>6 QSOs
- 11.25-11.40 N. Cappelluti High-z AGN search with Chandra and XMM and next decade efforts
- 11.40-11.55 R. Nanni The X-ray properties of the z~6 quasars
- 11.55-12.10 M. Sidhu Obscured Black Hole Growth in the Early Universe
- 12.10-12.25 F. Koliopanos Searching for the seeds of supermassive black holes
- 12.25-12.40 R. Serafinelli Searching for supermassive black hole binaries with sub-pc separations in the hard X-rays

# 12.40-13.00 Short Presentations

- F. Ricci Stormy weather in 3C 196.1: an hybrid radio galaxy shaping its environment up to 100s kpc scale
- E. McGrath The Prevalence of Massive Quiescent Disks in the Early Universe

A. Ruiz -

M. Sobolewska - Understanding evolution of radio galaxies through X-ray study of youngest extragalactic radio jets

## 13.00-14.00 Lunch Break

## Chair - J. Aird

- 14.00-14.20 E. Lusso (Invited) Tension with the LCDM model from a Hubble diagram of quasars
- 14.20-14.35 J. Scholtz Do powerful AGN really suppress star formation?
- 14.35-14.50 L. Klindt Fundamental differences between red and blue quasars
- 14.50-15.05 G. Canalizo The title is "AGN-driven outflows in dwarf galaxies"
- 15.05-15.20 T. Schmidt Mapping Quasar Light Echoes in 3D with Lya Forest Tomography
- 15.20- 15.35 G. Venturi Dissecting ionized galactic outflows in nearby AGN
- 15.35-16.00 F. Fiore (Ending Summary Talk) SMBH Feedback