Influence of the cluster environment on the galaxy-halo connection

Speaker: Dr. Anna Niemiec (University of Michigan)
Time: March 29, 2019 - 3:00 PM
Location: Loyola 171

*DOD[\ FOXVWHUFWXUHVOLQJWKHWRQHXIYWHQR EHRKPSRGVUHGV RI JDO
JUDYLW\ ,Q WKH KLHUDUFKLFDO ZRE\PDFFLURHQWPLRGHOI WPKDHO\OHRUPJ
LVRODWHG JDVCFDH[QLBHVLRQ XWQKGLHVUVWWDHQWGHQJJRRZD[WKWVLHQWDFUDFW Z
FOXVWHU HQYLURQPHQWWHISVWDRQZDEBSGRHEDDOSLFBLWQJUWKRHJDOD[\ HY
VWUXFWXUH IRUPLDQWLRQQ DQQG HJHGGVDYGLKHUQ XDPHUR XEMLHFWHUDFWLRQV
FOXVWHU ERWK DW WKH OHYHO RQWKW EDDQGRWQKFHVDHQGGVDHUUDPWV
SURSHUWLHV ,QRESVDHUWYLDFWXDRQV EHQWWQXRPHVUXFDJHWWPWKDW LWV
VWULSSHG E\ WKH WLGDO IRUFHVVRQ WKRHXKRPVHDV,XUWRKLQWWDBN W
PDVV UHODWLRQ QRWKWKHJDDDD3[LKHV FDXDYWHJUDVOZKHDN OHQVLQJ
XVLQJ VKHDU GDWD IURP WKH '(6 69 &K+C/SHQGWDHQGSW&HW WWXKHYVHV
WKHQ GLVFXVV RXU DQDO\VLV RI,QWKXHVWYRUVXKWGERQGRQDRERKDOORVHV
, ZLOO SUHVHQW WKH RQJRLQJ %8))HG2 W6R7HVQXDYUHJLQZJKWFKHLWNGHG
E\ WKH VL[+XEEOH)URQWLHU)LHFKGJVDG+D[\ WRKXDWWWHRUFXVVHGRGQGYE
FRYHUDJH WR WKHRQHRNWKHQVELQXVZWHEHUDVDC%3RZ$2V WR PDS WKH
GLVWULEXWLRQ EZLWKK HJVHDWFOKGMWXFLDWZH ERRWWKKEWFQXVWHU LWVHG
JDOD[LHV

$ NH\ GLUHFWLRQ LQ REVHUYDWLRKQHDVWHX[GV\URJDVKDHFWLYLR CDXWLURQS
WKHLU EODFN KROHV LQ WKH FRKQVWHL[WRRPWGXWLVU 7KRLFVDODVDQQGZ OSD
FXUUHQW DQG XSFRPLQJ JHQHUDWLRQRIWRVEROSHFDUXHUY EKVR W&RUPX
FRPSOHWH SLFWXUH VXFK VWXGLHVGQDHHG RVERVEXFEROXGQWWDRUUIEROV
KROH JURZWK , ZLOO SUHVHQW FKUDUHQFWVWZRU]NLQQ WKHUROYSLUQ
JDOD[LHV LQ VT GGJIRHVWKHZK,QFK KRDWRPHWHQLFLDQGSKSHFWURVF
7KLV LQFOXGHV FRQVWUDLQWV RQQGXVWRREHWXEKGOJDQG[6&8%D
:H XVH WKH VDPH PHWKRGRORJ\ DV RXZHGLWRKUDWFKRPR&2QH2G6 DUHHDG!
RI &26026 DORQH ZH FDQ H[SORUH [WKEXLORGOKSRDQGYLXRQFKLQW
WKH UROH RI $*1 WKHUHLQ DOOJZLWKULJHSUREQGHVRMDHWQLWLULFQV
ZLOO GLVFXVV WKRIUXHWYXHQHESHUWRWSLHFWDRKD[USEWSHU]DWLRQ DQG
RI WKH FRVPLF ZHEDWKSQDQQVWHG VOHDYLFJHQDGJHSSHFKWRWRPHRVSLF VXU

Winds of Change Around Black Holes

Speaker: Gregory Sivakoff (University of Alberta)
Time: November 23, 2018 - 3:00 PM
Location: Atrium 101

:LWK WKH DGYHQW RI FKDQJH LQ WKH QH[W GHFDGH

The Brightest Light in Canada

Speaker: Jeff Warner (Canadian Light Source)
Time: November 21, 2018 - 3:00 PM
Location: AT305

The Canadian Light Source National Synchrotron began collecting data in 2005 and has been under continual construction, upgrading or adding new capabilities, since that time. Synchrotrons provide extremely bright tunable x-rays that are relevant for many different types of measurements. The current suite of techniques with some select case studies is reviewed as well as new strategic directions. Programs such as our small molecule and powder x-ray diffraction will be introduced as well as simplified access initiatives.

White Dwarfs in Globular Clusters and the Field

Speaker: Jason Kalirai (STScI)
Time: November 9, 2018 - 3:00 PM
Location: Atrium 101

7KH OLIHF\FOHV RI PRVW VWDUV ZLDUWKH YHUHHVWDLQ WKHLU QXFOHDU IXHO DQG IDGH WKHLU PDLQ HSQHUJ\ VRXUFH EHIRUH WKH\ GLH DQG EHFRPH ZKLWH GZDUIV RI WKHVH VWDUV DQG WKHLU VWHOODU FRPSDQLRQV LQIOXHQFH WKH HQYLURQPHQWV LQ ZKLFK WKH\ IRUP DQG D OLQN WR KLJKHU VSHHG RXWIORZV DQG SODQHWDU\ QHEXODH 7KH OLIHF\FOHV RI VWDUV LQ GLYHUVH HQYLURQPHQWV \ DJH DQG OXPLQRVLW\ 7KURXJK D FRPELQDWLRQ RI JURXQG EDVHG VSHFWURVFRS\ ZH KYLHWRGZZSDUURE HLGQ WKHZLGHU RUSDQJ SRSXODWLRQV IURP WKH ILHOG 0LWONU\V: DV\SWDQRQLSQHQD DEQUGR DGRUEXQ DJHV ,QWHUSUHWDWLRQ RI WKHRQHVGDHWDLDU PDSVUR YOLRGVLQ JVQHZO

VFDOHV WKH FKURQRORJ\ RI WKH QLRCINFAO:XV VWMKU GWQKDHPLLQFDWOLHDY
DQG PRUH ,Q WKLVWHDOVLJHWWKH,OOOMRWEXVWUYHDWXLORQV IRUIRZKLWH GZDUI
:D\ DQG RIIHU VRPH WKRXJKWV RQ[WRJZHZQHFDQLERQVWDOHJMHJUDRJXHO
WHOHVFRSHV DQGL-V:6ZRWRLQR LHQWWRQGHVWKGLPHQVLRQV

Enabling Infrared Surveys of Gala

The intergalactic medium at the end of reionization

Speaker: Laura Keating (CITA, University of Toronto)
Time: October 26, 2018 - 3:00 PM
Location: Loyola 171

6 W X G \ L Q J W K H O X P L Q R X V H V I R U W K H U P D O K L V W R U \ R I W K H X Q L Y H U V H L V G L I
W K H \ D U H F K D O O H Q J L Q J D W W H O O L Q J W K H V W R U \ R I K R Z W K H X Q L Y H U V H E H J D Q D W
U H L R Q L] D W L R Q L E H J D Q W R N X U F Z H O O , Q G L Z K F X V V P \ Z
P R G H O O L Q J W K H L X Q P W G U D Q D F W K L F W P S R E K D V V H E R Q W] K U R X J K
D E V R U S W L R Q O L R Q P H S D U W L Z L R Q V E H Q H F R K P R O E H L V F R O O X W D G L D
W U D Q V I H U V L P X O D W L R Q V R D Q G H R E Q H O S U S H K G V K R U W V W P D , Z L O O
W K H F X U U H Q W G E Z D U G H P Y H U S R Q W K H D P R Q G V R I
V W L O O I R X Q G E H O R Z U H G V K L I W

PhD Thesis Defense: Integrated Light Stellar Population Synthesis of Globular Clusters Using Non-Local Thermodynamic Equilibrium Modelling

Speaker: Mitchell Young
Time: October 18, 2018 - 1:00 AM
Location: Loyola 188

: H S U H V H Q W D Q L K Q H Y H O R E X O D W L F Q U S W H X O D * L Q V Q D W K H V L
0 F : L O O L D P % H U Q V W H L Q I R F X V L Q R V S K H W K L F Q R S D H W F
W K H U P R G \ Q D P L F H T X L O L E U L X P 1 / 7 (S R R V H H Z L Q K D Y H H J F Q V U
F R P S U H K H Q V L Y H U X H V \ R 1 / (R Y K E L Q G H F Y G X D D Q Y W F R Q Q D L X D
L Q W H J U D W H G O L Q G W F R , Q W S H X E W U K S D Q W H O O D U J H O D E U V L Q
D Q G > 0 + @ D Q F H G V R U H S U R G X G 0 B 6 X Q R D Q G S W K Z R H G H K J U Q F H H P H
F R Y H U L Q J W K H S D * & D S R H S W X O D W S R E Q H P R H P E E U H U \ V K Q V / W R
D J H D Q G W R F R Y H L Q L Q J W & H D F U W L E Q * & H D J H V D Q G W
P D M R U L W \ R I W K W D O O L F L W L F G & V H W H U E X Z O R Q L E U K H \ , L X S H
- R K Q V R Q & R X V L Q V % H R O R U 9 , - Q E W U Y O W \ H R W , X U H V W O O J
P H W D O L F L W \ D Q G I R U G H U L Y L Q J O W K W L F J E Q G R G Q H W O J

R X W I O R Z V R Q V F L H Q W L I L F S D U W L F O H S K \ V L F V L Q W K H J O R E D O P D J Q H W R V S K H U H W K H P R V W H [W U H P H L R Q L] H G J D V Y L R O G U R S H G W R E H F R Q W D L Q H G W L \ D W K L J K H Q H U J L H V D Q G F R O O L G H U V \ V W H P V W K H 9 H U \ $ U U D \ 9 / $ D W O R Z H Q H U J L H V U H T X L U H V V X S H U F R Q G X F W L Q J T X D V L X V L Q J V \ Q F K U R W U R Q H P L V V L R Q I U H T X H Q F L H V D Q G E H Z L Q J U H V X O W V S U R Y L G H D Q D E V R O X W H O \ Q H F H V V D U \ I R U W K H T X D V D U I H H G E D F N

Rare Isotope beams (RIB) at TRIMF

Less than 1 billion year after the Big Bang (< 8% of today's age of the Universe), the cosmic star formation rate and stellar mass density of galaxies increased by more than one order of magnitude, a gradient steeper than at any other time. Hence it is expected that galaxies during this early rapid growth phase show significantly different spatial and physical properties compared to galaxies at later times. I present how observations with Spitzer, the Atacama Large Millimeter Array (ALMA), and the HST help us to study and understand this impor