

**Application Form****Profile****Office Use Only:**☒ Ward 2**Which Boards would you like to apply for?**

Board of Public Utilities: Submitted

**Ms./Mr.**

Mr.

Brian

First Name

D.

Middle Initial

Siana

Last Name

Home Address

Suite or Apt

Riverside

City

CA

State

Postal Code

Mobile:

Primary Phone

Business:

Alternate Phone

Email Address

University of California, Riverside

Employer

Associate Professor of Physics  
and Astronomy

Job Title

**Business Address****Business Phone****Length of residence in City of Riverside**

10 years

**Are you a registered voter of the City of Riverside?**☒ Yes ☐ No**Have you ever been convicted of a crime of moral turpitude?**☐ Yes ☒ No

## Do you have adequate time to serve?

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☒ Yes ☐ No

\*Eligibility requirements per City Charter Article VIII Section 805.

Applications may be screened on the basis of information submitted with this form.

You are welcome to provide a resume and/or letters of endorsement.

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## Interests & Experiences

### WHY YOU WANT TO SERVE ON A CITY BOARD OR COMMISSION:

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I am deeply interested in resource use and environmental sustainability. I am especially interested in the rapid transition that utilities are undertaking to carbon neutral energy sources as mandated by CA law. I think there are incredible opportunities for Riverside that can be beneficial both to ratepayers and to the environment. I am also interested in water use and conservation as well as waste management. As Associate Faculty Director of Sustainability at UCR, I have been involved with monitoring our energy, water and waste and making decisions about investments and conservation, and coordinating efforts with the City of Riverside and RPU.

### EXPERIENCE OR SPECIAL KNOWLEDGE PERTAINING TO AREA(S) OF INTEREST:

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I have a B.S. in Applied and Engineering Physics and a PhD in Physics. I teach a popular, large (400+ student) course at UC Riverside on energy and the environment, which covers how we use energy, sources of energy, and the environmental impacts of each source. I am the Associate Faculty Director of Sustainability at UC Riverside, a new role at UCR that began in 2018. In this role, I am coordinating sustainability outreach, curriculum, and research on the UCR campus. This has included monthly or quarterly discussions and collaborations with the City of Riverside and Riverside Public Utilities, most recently with the Riverside Green Summit in Oct. 2019. This has also included working toward the University of California's carbon neutrality by 2025 initiative. Finally, I am the chair of the sustainability working group for UCR's long range development plan, which determines how they can appropriately use physical space, infrastructure and resources in the next 15 years. This has included engagement with stakeholders in the community.

### EDUCATIONAL BACKGROUND:

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B.S. Applied and Engineering Physics, Cornell University (1999) Ph.D. Physics, University of California, San Diego (2005)

### OCCUPATIONAL EXPERIENCE:

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Postdoctoral Scholar, Infrared Processing and Analysis Center, Caltech (2005-2008) Postdoctoral Scholar, Astronomy Department, Caltech (2008-2011) Assistant Professor, Physics Dept, UCR (2011-2017) Associate Professor, Physics Dept, UCR (2017-) Associate Faculty Director of Sustainability (2018- )

### PROFESSIONAL OR TECHNICAL ORGANIZATION MEMBERSHIPS:

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Member, American Astronomical Society

**CIVIC OR COMMUNITY EXPERIENCE, MEMBERSHIPS, OR PREVIOUS PUBLIC SERVICE APPOINTMENTS:**

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I have been involved with numerous outreach events at local schools and juvenile halls, both for science and sustainability outreach.

COMMISSION ON AGING  
AIRPORT COMMISSION \*  
BUDGET ENGAGEMENT COMMISSION  
COMMUNITY POLICE REVIEW COMMISSION  
CULTURAL HERITAGE BOARD \*  
COMMISSION ON DISABILITIES  
BOARD OF ETHICS  
HUMAN RELATIONS COMMISSION  
HUMAN RESOURCES BOARD  
BOARD OF LIBRARY TRUSTEES \*  
METROPOLITAN MUSEUM BOARD  
PARK AND RECREATION COMMISSION \*  
PLANNING COMMISSION \*  
BOARD OF PUBLIC UTILITIES \*  
TRANSPORTATION BOARD \*

\*A Statement of Economic Interests is required. Any information listed on this application is a matter of public record and will be disclosed upon request.

Under existing California law, a member of a board or commission may not make, participate in making, or attempt to influence a governmental decision if it is reasonably foreseeable that the decision could have a material financial effect on that member, the member's immediate family, or any of his or her financial interests. There is also a special category of conflicts of interest which strictly forbids members and/or their employers from having financial interests in city contracts. Careful consideration should be given to this issue and applicants are encouraged to contact the City Clerk's Office if they have any questions.

**NOTICE REGARDING INCOMPATIBLE OFFICES**

Under existing California law, no member of City boards or commissions may simultaneously hold two public offices that are incompatible. (California Government Code Section 1099)

Offices are incompatible if one of the offices has supervisory, auditory or removal power over the other, if there would be any significant clash of duties or loyalties between the offices, or if public policy considerations make it improper for one person to hold both offices.

**Do you currently hold a position as an appointed or elected member of a governmental board, commission, committee, or other body?**

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☐ Yes ☒ No

**If “Yes”, please state position:**

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Members of boards and commissions are covered by Workers’ Compensation insurance while serving. If appointed, completion of a LiveScan background screening is required prior to commencement of service.

Please call the City Clerk’s Office at 826-5557 or visit [RiversideCA.gov/city\\_clerk](http://RiversideCA.gov/city_clerk) for more information. City Clerk’s Office, City Hall, 3900 Main Street, 7th floor, Riverside, CA 92522

[CV\\_siana.pdf](#)

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Upload a Resume

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Additional document(s)

**How did you learn about the Board and Commission vacancies?**

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☒ Referred by

**Are you interested in being contacted by the Registrar of Voters to volunteer as a poll worker?**

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☐ Yes ☒ No

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# Brian Siana

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CONTACT INFORMATION	University of California, Riverside Dept of Physics and Astronomy Riverside, CA	<i>Phone:</i> <i>Fax:</i> <i>E-mail:</i>
EDUCATION	<b>PhD – Physics</b> , December 2005 – <b>University of California - San Diego</b> , La Jolla, CA USA – “Optical-IR Selection of High-Redshift QSOs and the $z=3$ QSO Luminosity Function” – Advisor: Professor Harding E. (Gene) Smith  <b>BS – Applied and Engineering Physics</b> , May 1999 – <b>Cornell University</b> , Ithaca, NY USA	
POSITIONS	Associate Faculty Director of Sustainability, <b>UC Riverside</b> , 2018-present  Associate Professor, Dept. of Physics and Astronomy, <b>UC Riverside</b> , 2017-present  Assistant Professor, Dept. of Physics and Astronomy, <b>UC Riverside</b> , 2011-2017  Senior Postdoctoral Scholar, <b>Caltech</b> , 2008-2011 Sponsor: Chuck Steidel Postdoctoral Researcher, Spitzer Science Center, <b>JPL/Caltech</b> , 2005-2008 Supervisor: Harry Teplitz	
AWARDS	<b>Junior Excellence in Teaching (JET) Award (UCR, 2016)</b> - Annual award to assistant professor demonstrating commitment, determination, and outstanding teaching  <b>Commitment to Graduate Diversity Award (UCR, 2018)</b> - Annual award to faculty member who “actively champions efforts to promote and maintain a diverse and inclusive campus climate”	
RESEARCH INTERESTS	<ul style="list-style-type: none"><li>• <b>Gravitational Lensing:</b> Harnessing the magnifying power of strong gravitational lenses to study the properties of galaxies too faint/small to be studied with existing telescopes.</li><li>• <b>Reionization of the Intergalactic Medium and Ionizing Backgrounds:</b> Determining the mechanisms that allow ionizing photons to escape from galaxies into the intergalactic medium.</li><li>• <b>Dwarf Galaxies:</b> Understanding the unique properties of dwarf galaxies: metal production and outflow, bursty star formation, dust extinction, and dark matter properties.</li></ul>	
CITATION METRICS	<ul style="list-style-type: none"><li>• 110 refereed papers (as of Nov. 02, 2019)</li><li>• <math>h</math>-index= 51 (NASA ADS)</li><li>• 8997 total citations (as of Nov. 02, 2019)</li></ul>	
COMMITTEES	Chair, Sustainability Working Group, LRDP (2019-). Keck Observatory UC Time Allocation Committee (2018-) UCR Committee on Sustainability (2019-) Committee on Diversity (Physics Dept., 2016-, chair: 2017-) Cal-Bridge (CSU-UC Bridge Program) Steering Committee (2016-) Graduate Admissions Committee (Physics Dept., 2016-)	

Space Telescope User's Committee (2013-2015), **Chair** (2014-2015)  
 Spitzer Space Telescope TAC (2013, 2016), **Panel Chair** (2013)  
 Hubble Deep Fields Initiative Science Working Group (2012)  
 Hubble Space Telescope TAC (2012-2013)  
 UC Observatories Advisory Committee (2011-2014)

PROGRAMS AWARDED AS PI ONLY	<ul style="list-style-type: none"> <li>• <b>PI</b>, NSF/AST (2016), (<b>\$371,982</b>)            "Comprehensive Spectroscopic Study of Gravitationally Lensed Dwarf Galaxies at the Peak Epoch of Star Formation"</li> <li>• <b>PI</b>, Hubble Space Telescope (2015), 48 orbits: (<b>\$173,061</b>)            "The Final UV Frontier: Legacy Near-UV Imaging of the Frontier Fields"</li> <li>• <b>PI</b>, Hubble Space Telescope (2014), Medium Hubble Archival Proposal: (<b>\$88, 077</b>)            "Quantifying Bursty Star Formation and Dust Extinction in Dwarf Galaxies at <math>0.75 &lt; z &lt; 1.5</math>"</li> <li>• <b>Co-PI</b>, NSF (2013), (<b>\$133,721 to B. Siana</b>)            "The MOSFIRE Deep Evolution Field Survey"</li> <li>• <b>PI</b>, Hubble Space Telescope (2013), 48 orbits: (<b>\$186,679</b>)            "The Ultraviolet Frontier: Completing the Census of Star Formation at Its Peak Epoch"</li> <li>• <b>PI</b>, Hubble Space Telescope (2012), 26 orbits: (<b>\$130,694</b>)            "Ultra-Faint Galaxies at the Peak Epoch of Star Formation"</li> <li>• <b>PI</b>, Hubble Space Telescope (2011), 27 orbits: (<b>\$84,979</b>)            "Resolving Lyman Continuum Emission from Ly<math>\alpha</math>-Emitters"</li> <li>• <b>PI</b>, Hubble Space Telescope (2010), 36 orbits: (<b>\$160,139</b>):            "Ionizing Emission from the Faint Galaxies Responsible for Reionization"</li> <li>• <b>PI</b>, Hubble Space Telescope (2008), 39 orbits: (<b>\$167,630</b>):            "Resolved Imaging of Escaping Lyman Continuum"</li> <li>• <b>PI</b>, Spitzer Space Telescope (2008), 22 hours: (<b>\$109,800</b>):            "The First Investigation of the 3.3 Micron PAH Feature at High Redshift"</li> <li>• <b>PI</b>, Hubble Space Telescope (2007), 37 orbits: (<b>\$154,062</b>):            "First Resolved Imaging of Escaping Lyman Continuum"</li> <li>• <b>PI</b>, Spitzer Space Telescope (2007), 16.6 hours: (<b>\$77,970</b>):            "Harnessing High Redshift Beacons: IRS Spectra of Lensed LBGs"</li> <li>• <b>PI</b>, Spitzer Space Telescope (2006), 21.8 hours: (<b>\$90,155</b>):            "The First IRS Spectrum of a Lyman Break Galaxy"</li> </ul>
TEACHING EXPERIENCE	<ul style="list-style-type: none"> <li>• PHYS 018 - Energy &amp; Environment (non-science majors)</li> <li>• PHYS 040A - Classical Mechanics (intro. level for physical scientists and engineers)</li> <li>• PHYS 111 - Stellar Astrophysics (upper level, physics majors)</li> <li>• PHYS 203 - Statistical Astronomy (grad level)</li> <li>• PHYS 214 - Observational Techniques (grad level)</li> </ul>
MENTORING	<ul style="list-style-type: none"> <li>• Undergraduate students: 6 student researchers, 2 undergrad. theses, 1 honors thesis</li> <li>• Summer interns: 1 Cal-bridge scholar (2018), 1 student from U. of Lyon (2018)</li> <li>• Graduate students: Anahita Alavi (2011-2016), William Freeman (2012-2017), Kaveh Vasei (2013-2018), Najmeh Emami (2014-2019), Timothy Gburek (2015-), Christopher Snapp Kolas (2018-)</li> <li>• Postdocs: Alberto Dominguez (2011-2014), Anahita Alavi (2016-2017)</li> </ul>
REFEREED PUBLICATIONS	<a href="#">Link to ADS list of publications</a>