## ORCID

Connecting Research and Researchers

## What is ORCID?

#### ORCID'S VISION IS A WORLD WHERE ALL WHO

PARTICIPATE IN RESEARCH, SCHOLARSHIP, AND INNOVATION

ARE UNIQUELY IDENTIFIED AND CONNECTED TO THEIR

CONTRIBUTIONS AND AFFILIATIONS ACROSS TIME,

DISCIPLINES, AND BORDERS.

#### **ORCID Services**

- 1. Free unique identifier for researchers
- 2. Record to document research activities
- 3. API to transfer this data between systems

## **ORCID for Graduate Students**





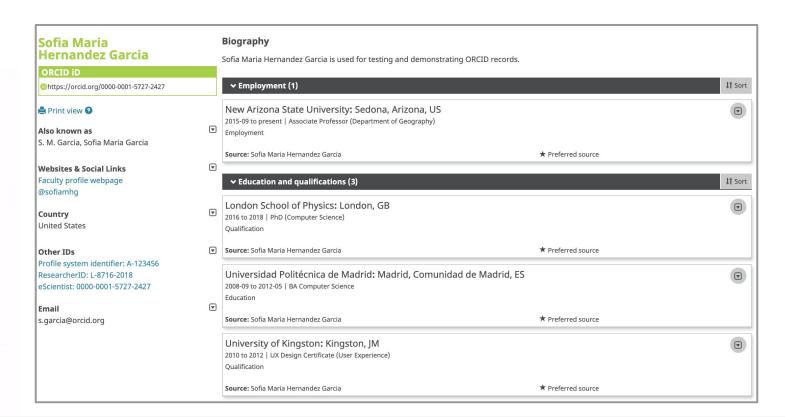
## Free Unique Identifier

## Sofia Maria Hernandez Garcia ORCID iD

https://orcid.org/0000-0001-5727-2427

#### **ORCID** Record:





#### **ORCID** Record:



Awards can be written to ORCID records, labeled as "Distinctions"

3MT Awards at various universities and graduate associations are currently in the works

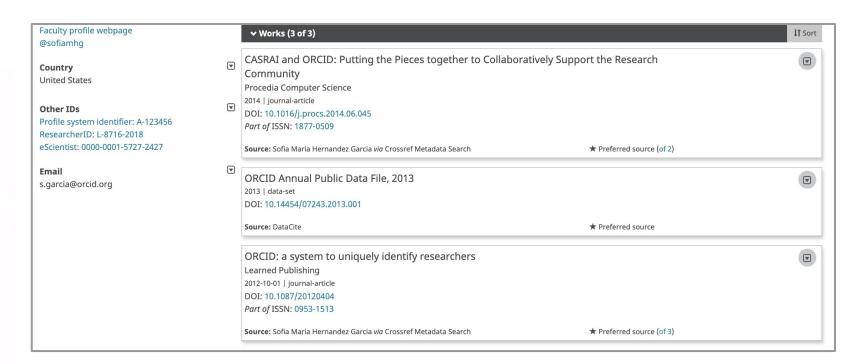
#### ▼ Invited positions and distinctions (3)

Royal Society of Arctic Studies: Iqaluit, Nunavut, CA 2015 | Rutherford Medal of Innovation (Iceberg - Thermodynamics LAB) Distinction

Source: Sofia Maria Hernandez Garcia

#### **ORCID** Record:





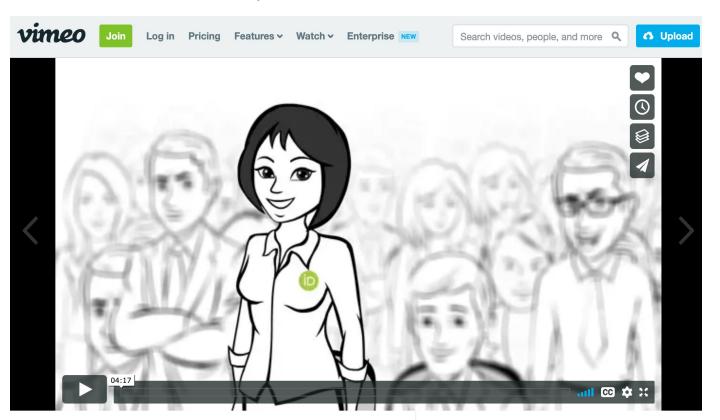
### Specific Benefits for Grad Students

- Get an ORCID iD & Record early in their scholarly career
- Begin building their ORCID record from the start so they don't have to retroactively add contact later
- 3. Grad students will carry this iD with them throughout their research career
- They will see content added to their ORCID record from publishers, funders and employers
- 5. They will experience the efficiency of logging into a system with their ORCID iD, content will be pre-populated for them

ORCID Blog post: Empowering Graduate Students Research: Linking ORCID Identifiers to Theses and Dissertations, <a href="https://orcid.org/blog/2014/03/20/theses-dissertations-orcid">https://orcid.org/blog/2014/03/20/theses-dissertations-orcid</a>

#### What is ORCID?

https://vimeo.com/97150912



What is ORCID?

More from ORCID

Autoplay next video

# ORCID for Librarians & Graduate School Administrators

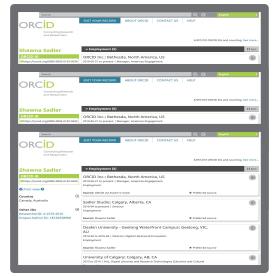
#### Researcher

- 1) Researcher creates ORCID iD
- 2) Populates record

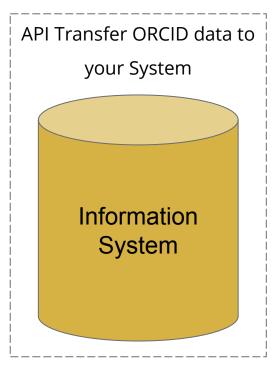


## All records are saved in the ORCID Registry

**ORCID** 



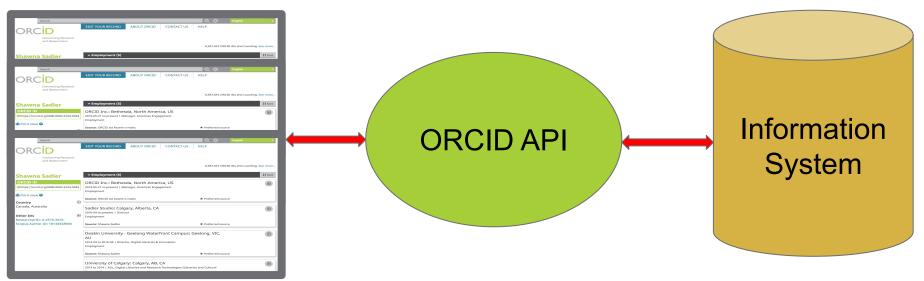
#### Your Organization





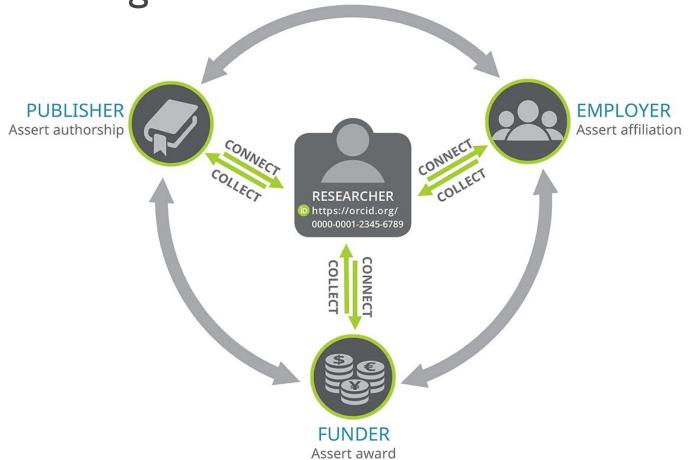
## API Technology to Transfer Data

#### **ORCID** Registry





**ORCID** for Organizations



#### ORCID for Grad School Administrators

- Get data on current students for reporting
- Analyze data on Grad students works & funding
- Call data on Alumni for reporting
- Create great stories of success for Executive & Communication pieces

#### **ORCID** for Librarians & Archivists

- ORCID iD is a unique identifier
- So published work can be attributed to the right person
- This also enables researchers to change their name without repercussion to their scholarly record.
- The ORCID registry is open to be harvested
- Improving access and discoverability to the research
- Your ETD system is similar to a publisher's manuscript submission system
- You accept works, validate the work & author, add an ORCID iD and in essence, publish it.

### What other Graduate Schools are doing in the US

- Univ. of Texas Southwestern Medical Center requiring all learners to get an ORCID iD and connect it with UTSW's centralized ORCID integration, https://lyrasisnow.org/orcid-for-learners-at-ut-southwestern-medical-center/
- Univ. of Maryland ORCID membership is led by the graduate school and all grad students are encouraged to connect their ORCID iD
- Univ. of Massachusetts at Amherst Graduate Council approved mandatory ORCID iDs for students finishing their degrees
- Indiana University Bloomington typically promotes ORCID at grad student receptions at the beginning of each semester
- Texas A&M all grad students must have an ORCID iD when they submit their ETD
- Univ. of Virginia ORCID API is integrated with ETD Repository (Samvera) although ORCID iDs are optional, not required.
- Augusta University ORCID iDs are highly encouraged when submitting ETDs; ORCID is promoted at
  graduate school orientation during the Libraries session, as well as covered in specific graduate courses
  (e.g. Scholarly Communications for Nursing PhDs). Our hope in the future is to have ORCID iDs required
  by all graduate students.

## Funding agency deposit

US Department of Energy

E-Link

https://www.osti.gov/elink/

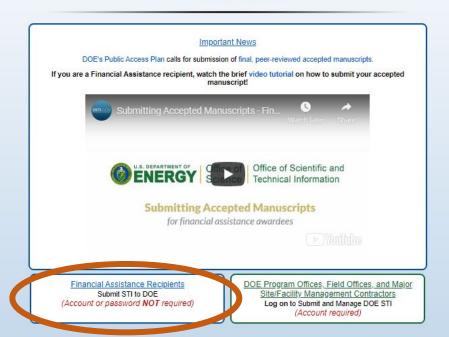




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DOE STI Management System



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## On Improving Analytical Models of Cosmic Reionization for Matching Numerical Simulations

Full Record

Other Related Research

#### THESIS/DISSERTATION:



DOI: 10.2172/1258785

#### OTHER AVAILABILITY

Please see Document Availability for additional information on obtaining the full-text document. Library patrons may search WorldCat to identify libraries that hold this thesis or dissertation.

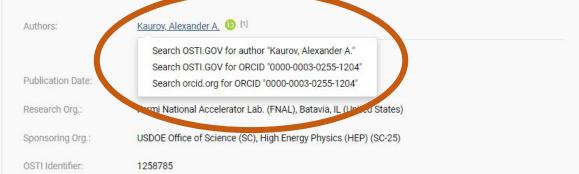
#### SAVE / SHARE:

Export Metadata > Save to My Library



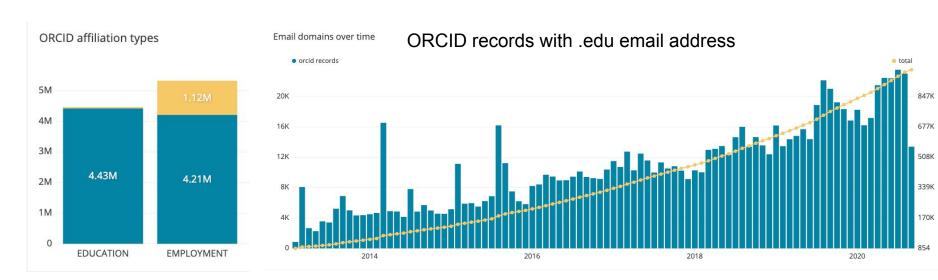
#### Abstract

The methods for studying the epoch of cosmic reionization vary from full radiative transfer simulations to purely analytical models. While numerical approaches are computationally expensive and are not suitable for generating many mock catalogs, analytical methods are based on assumptions and approximations. We explore the interconnection between both methods. First, we ask how the analytical framework of excursion set formalism can be used for statistical analysis of numerical simulations and visual representation of the morphology of ionization fronts. Second, we explore the methods of training the analytical model on a given numerical simulation. We present a new code which emerged from this study. Its main application is to match the analytical model with a numerical simulation. Then, it allows one to generate mock reionization catalogs with volumes exceeding the original simulation quickly and computationally inexpensively, meanwhile reproducing large scale statistical properties. These mock catalogs are particularly useful for CMB polarization and 21cm experiments, where large volumes are required to simulate the chaptered signal.



#### **ORCID** stats

- 9.5 Million ORCID iDs issued around the world in every discipline
- 4.43 million records include Education
- 150,000 works "Thesis" "Dissertation"
- Almost 1 Million ORCID Records with .edu email address affiliation



#### Written to ORCID records

- Over 9.5 million ORCID iDs issued
- 61,230,789 works entries in ORCID registry as of September 18, 2020
- 49,261,384 of those works were written to ORCID by member organizations via ORCID API

#### Top organizations adding works:

- Scopus Elsevier (23,636,460)
- ResearcherID (6,233,393)
- Crossref (4,365,093)
- Europe PubMed Central (3,258,675)
- Crossref Metadata Search (2,692,894)
- CIÂNCIAVITAE (1,162,793)
- Publons (1,071,310)

- NASA Astrophysics Data System (491,603)
- DataCite (187,036)
- University of Helsinki (163,141)
- University of Hong Kong (141,980)
- BASE Bielefeld Academic Search Engine (166,263))
- New York University (109,458)