



ngse<sub>6</sub>

next generation solar energy conference  
Dec. 6<sup>th</sup>-8<sup>th</sup> 2021  
Boulder, USA & Nuremberg, Germany



## Concepts to break the Detailed-Balance Limit in Photovoltaics

*The NGSE6 will be held in a hybrid format with online and onsite options.*

*Participation is by application and free of charge.*

*The NGSE-LatAm adds a special two-day program in Spanish on Dec. 9<sup>th</sup>-10<sup>th</sup> 2021.*

### Confirmed Speakers/Lecturers:

**Osbel Almora Rodriguez**, INAM

**Matt Beard**, NREL

**Felix Castellano**, North Carolina State University

**Bruno Ehrler**, AMOLF

**Shanhui Fan**, Stanford University

**Neil Greenham**, University of Cambridge

**Sandrine Heutz**, Imperial College

**Christopher Kay**, Saarland University

**Thomas Kirchartz**, Forschungszentrum Jülich

**Victor Klimov**, Los Alamos National Laboratory

**Jenny Nelson**, Imperial College

**Arthur Nozik**, NREL

**Sean Shaheen**, University of Colorado Boulder

**Ming Lee Tang**, University of Utah

**Mike Toney**, University of Colorado Boulder

**Anna Tröger**, Wiley

**Rik Tykwinski**, University of Alberta

**Xiaoyang Zhu**, Columbia University

**„Photovoltaics is a rapidly changing field in science. New technologies and materials are enabling breakthroughs that seemed impossible a decade ago. The NGSE – Next Generation Solar Energy conference was developed by scientists in order to keep the community connected and updated on these developments by offering first class lectures and tutorials on emerging PV-Technologies“**

[www.ngse.info](http://www.ngse.info)

# NGSE6 Program

The conference concept introduces the topic “Next Generation Solar Energy” with a series of 45 min tutorials. A series of 25 min long impulse lectures on current results and trends will complement the tutorials. In 2021 the NGSE6 is focussing on concepts to break the detailed-balance limit and provides sessions on:

## Tutorial Topics

- Detailed-balance Limit and Fundamentals
- Multiple Exciton Generation
- Up and Down Conversion
- Singlet Fission
- Hot Electron Capture
- Emerging Concepts

**The complete schedule and titles of the presentations will be announced shortly. Updated information is available on the official internet site [www.ngse.info](http://www.ngse.info). Mark your calendars. Registration will start soon.**

## NGSE-LatAm

This year, NGSE6 expands to a Latin American context ([NGSE-LatAm](http://www.ngse.info)) by offering a special two-day program in Spanish language. To contribute to the educational mission, NGSE-LatAm will offer a solid tutorial program in the area of novel photovoltaic technologies in order to enhance, update and expand the academic training of a greater number of Latin and Hispanic students.

The topics of the NGSE LatAm will be focused on (i) Organic PV & Perovskite PV (ii) nanostructured PV, (iii) next-generation PV, and (iv) Innovative Photovoltaic Applications. These topics will be presented in tutorials, plenary talks short lectures held by recognized experts.

## Partners:



## Sponsors:



## Organizing Committee:

**Prof. Christoph J. Brabec**

**Prof. Dirk M. Guldi**

**Dr. Ning Li**

Friedrich-Alexander University Erlangen-Nürnberg

**Prof. Garry Rumbles**

National Renewable Energy Labs  
University of Colorado Boulder

**Dr. Jens Hauch**

Helmholtz Institute Erlangen-Nürnberg  
for Renewable Energy (HI ERN)

**Dr. José Darío Perea Ospina**

University of Toronto

## Organizers for NGSE LatAm

**Prof. Katherine Gross**

**Prof. Alejandro Ortiz**

**Prof. Wilson Lopera**

Universidad del Valle, Columbia

**Ing. Victor A. Rodriguez**

Georgia Institute of Technology

## Contact:

**Email:** [contact@ngse.info](mailto:contact@ngse.info)

**Web:** [www.ngse.info](http://www.ngse.info)