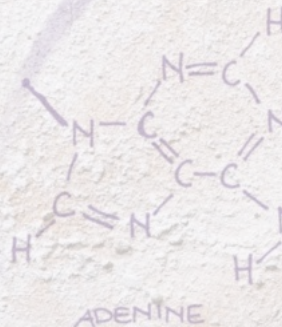


BACKBONE 1

COMPLEMENTARY  
PAIRING  
OF THE BASES



METROPOLIS ALGORITHM

initialize  $x_1, n$  and  $s$   
for  $i = 1 : (n - 1)$  do  
while  $x_{i+1}$  not assigned

draw  $z \in [0, 1]$  and  $u_i \in [-1, 1]^d$   
 $x_{\text{new}} = x_i + u_i s$   
if  $f^2(x_{\text{new}})/f(x_i) \geq z$  then  $x_{i+1} = x_{\text{new}}$



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quicksort( $A, i, k$ ):  
if  $i \leq k$ :  
     $p := \text{part}$   
    quicksort( $A, i, p - 1$ )  
    quicksort( $A, p + 1, k$ )

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when  $f = 0$  we retrieve LAPLACE



PA SC 21

Geneva  
Switzerland

5-8 July 2021





# Contributions

## Papers, Minisymposia and Posters



Conference chairs

**Sinead Ryan** (Trinity College Dublin) and  
**Bastien Chopard** (University of Geneva)

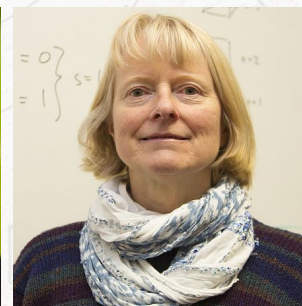
Technical program organized around eight scientific domains:

- Chemistry and Materials Science
- Life Sciences
- Physics
- Climate and Weather
- Solid Earth Dynamics
- Engineering
- Computer Science and Applied Mathematics
- Emerging Application Domains



# Program

- 50+ topically-focused interdisciplinary minisymposia
- Peer-reviewed papers
- Poster sessions
- Panel discussion: “New Challenges, New Computing Paradigms”
- Interdisciplinary dialogue
- Social events



**Keynotes from Vivien Kendon** (Durham University) on the prospects and challenges of **quantum computing** and **Jeronimo Castrillon** (TU Dresden) on **domain specific languages for heterogeneous and emerging computer architectures.**

**Public lecture from Dalia Conde** (University of Southern Denmark and Species360) on the use of **machine learning, big data and exascale computing for tackling biodiversity loss.**







# Submissions & Volunteers

**Submissions for papers, minisymposia and posters** will open in the fall

Check for updates on <https://pasc21.pasc-conference.org/>

If you would like to be added to the newsletter: write to Tatjana [tatjana.ruefli@cscs.ch](mailto:tatjana.ruefli@cscs.ch)

## Opportunities for student participation: Student Volunteer Program

We are looking for enthusiastic students who are interested in helping us run the event.

You'll get complimentary registration for the conference, and

- get to know participants from all over the world
- attend talks in your field and beyond
- work hard and play hard with a fun team of people!

<https://pasc21.pasc-conference.org/about/student-volunteer-program/>



# Student Volunteer Program

**PASC21**  
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Switzerland  
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<https://pasc21.pasc-conference.org/about/student-volunteer-program/>



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