



*Physics and Applications of High Brightness Beams:*

*Towards a Fifth Generation Light Source*

San Juan, Puerto Rico — March 25-28, 2013

Dear Colleague,

It is with pleasure that we invite your participation in the workshop entitled, “The Physics and Applications of High Brightness Beams: Towards a Fifth Generation Light Source”, to be held in San Juan, Puerto Rico, March 25-28, 2013.

The workshop mission is given in the following statement:

This latest version of the ICFA-sponsored workshop series on *Physics and Applications of High Brightness Beams* further refines the previous mission of the meeting, to examine the state-of-the-art in high brightness beam physics and technology as it is applied in advanced accelerators and light sources, to embrace a more ambitious agenda — the merging of the application fields. The concept, to create compact, high brilliance X- and  $\gamma$ -ray sources using cutting edge methods from the advanced accelerator field, has given rise to the description “5<sup>th</sup> generation light source”. Given the dramatic maturation of both advanced accelerators and FELs in recent years, the time is right for this step, which when taken may also be correctly seen as a compelling milestone on the road to yet higher energy applications. Thus we are searching in this workshop to gather leaders in advanced and novel acceleration techniques, experts in the intricate physics of free-electron lasers, practitioners of high brightness beam physics — including those investigating hybrid concepts such as plasma based electron beam sources — and interdisciplinary researchers who have direct interest in two or more of these fields. The resulting discussions are intended to provide tangible and timely guidance on how to proceed with a highly stimulation and challenging mission: the marriage to advanced accelerators and light sources.

The preliminary website for the workshop has been launched. Please bookmark

<http://pbpl.physics.ucla.edu/HBEB2013/index.html>

In the meantime, the following information is now available:

- Registration will be open soon. As the number of attendees will be limited, early registration is encouraged. The registration fee will be \$450 US and will support the conference infrastructure, refreshments, attendance of young scientists and students.
- The program is now being prepared, and will include invited and contributed plenary talks in the mornings, with the afternoons dedicated to working groups.

I hope to see as many of you as possible in San Juan in March!

Sincerely,

James Rosenzweig  
Co-Chairman

Massimo Ferrario  
Co-Chairman

Luca Serafini  
Program Committee chair