

Guest Editors:
Manfred Bayer - Christoph Becher - Peter van Loock

January 2015

Topical Issue “*Quantum Repeaters: From Components to Strategies*”

Dear Colleague,

The *Quantum Repeater* puts forward a concept encompassing numerous, if not all, aspects of future components and devices of quantum information technology. Relevant platforms include quantum optical systems, semiconductor based components, superconducting quantum devices, and more and more hybrid systems bridging different technologies.

The topical issue is dedicated to support future joint research activities at both the national and international levels. We aim at documenting the widespread activities in this field by their progress within and especially across the boundaries of traditional fields.

More specifically we are asking contributions putting forward novel realizations of

simple quantum gates and links
quantum memories
single photon sources
novel protocols
hybrid implementations

and related fields. We cordially invite you to contribute to this special issue. You are kindly invited to send in your manuscript containing new, high quality, and unpublished material by

~~May 31, 2015~~ **July 31, 2015**

All manuscripts will be subject to a standard review procedure with respect to their degree of novelty, relevance, and quality of presentation. Immediate and speedy reviewing is supported by online submission at

<https://www.editorialmanager.com/aphb/>.

Manuscripts will be readily available online about 2 weeks after acceptance. We expect the printed issue to be out later in 2015.

Looking forward to receiving your contribution

Sincerely,



Editor's Office, Applied Physics B, Wegeler Str.8, D-53115 Bonn, Germany ,
appphys@uni-bonn.