Quantum Physics and the Nature of Reality

Project Review Meeting 2011 Sunday, July 3 – Thursday, July 7, 2011 International Academy Traunkirchen, Austria

Dear Meeting Participants:

On behalf of the Program Chair, Professor Anton Zeilinger and the John Templeton Foundation, we welcome you to the first Project Review Meeting to be held on July 3 – 7, 2011 at the International Academy Traunkirchen (IAT), Austria.

The main purpose of this first Project Review Meeting is to bring synergy to the cohort of twenty research projects that are similarly focused on the theme of the John Templeton Foundation's 2010 Funding Priority on *Quantum Physics and the Nature of Reality*.

We are planning to hold another review meeting toward the end of the program. The next meeting will be focusing more on assessing progress/results and bringing synergy to possible next level of investigations.

In this initial gathering, we expect to have three and a half days of rich in-depth discussion among participants which will undoubtedly generate significant synergy and creativity. To optimize its impact, each project leader (or project team representative) will be given 30 minutes each for presentation, followed by 15 minutes of Q&A and follow-up discussion. We also expect to have several formal and informal discussion periods during the three-day meeting.

We suggest that each presentation include the following information:

- (1) Title & Project Leader(s)
- (2) Brief explanation of Project Goal(s) & Project's relevance to the Call
- (3) Core Contents & Proposed Approaches of the Project with particular emphasis on its novel aspects

All speakers are asked to submit their presentation abstract by May 30, 2011 to IAT: Ms. Andrea-Margarethe Aglibut [andrea.aglibut@univie.ac.at].

For more information about the grant program, please visit: http://www.templeton.org/what-we-fund/funding-priorities/quantum-physics-and-the-nature-of-reality

Meeting Schedule:

The tentative meeting agenda given below will be updated with talks as they are finalized, which may include some evening discussions. Please note that changes will be made as needed to the events and times:

July 3, 2011 – Arrival Date

7:00 pm	Reception
8:00 pm	Music performance

July 4, 2011 - Day One

7:30 am –	Breakfast
9:00 am	Welcome by Anton Zeilinger, Program Chair, President, IAT
	Introduction to the Meeting by Hyung Choi, Director, JTF
	Talks
10:30 am	Coffee Break
11:00 am	Talks
12:30 pm	Group Lunch
2:30 pm	Talks
4:00 pm	Break
4:30 pm	Talks
6:00 pm	Time for Discussions
7:00 pm	Group Dinner
8:30 pm	Evening Discussion

July 5, 2011 – Day Two

7:30 am –	Breakfast
9:00 am	Talks
10:30 am	Coffee Break
11:00 am	Talks
12:30 pm	Group Lunch
2:30 pm	Networking Event: Excursion to the Kaiservilla in Bad Ischl
	(Please see attached for details of Excursion)
7:00 pm	Group Dinner
8:30 pm	Evening Discussion

For more information about the grant program, please visit:

http://www.templeton.org/what-we-fund/funding-priorities/quantum-physics-and-the-nature-of-reality

July 6, 2011 – Day Three

7:30 am –	Breakfast
9:00 am	Talks
10:30 am	Coffee Break
11:00 am	Talks
12:30 pm	Group Lunch
2:30 pm	Talks
4:00 pm	Break
4:30 pm	Talks
6:00 pm	Time for Discussions
7:00 pm	Closing Remarks
	Group Dinner
8:30 pm	Evening Discussion

July 7, 2011 – Day Four

7:30 am –	Breakfast
9:00 am	Talks
10:30 am	Coffee Break
11:00 am	Talks
12:30 pm	End of Program
1:00 nm	Checkout Time

List of Participants:

Participants will include the grant winners of the 2010 Funding Priority, *Quantum Physics and the Nature of Reality*, the Program Chair, and special expert guests who will enrich the program.

Program Chair:

Anton Zeilinger (University of Vienna)

For more information about the grant program, please visit:

http://www.templeton.org/what-we-fund/funding-priorities/quantum-physics-and-the-nature-of-reality



JOHN TEMPLETON FOUNDATION

Funding Priority Grant Winners:

Charles Bennett (IBM, Research Division)

Caslav Brukner (Faculty of Physics, University of Vienna)

Jeffrey Bub (University of Maryland)

Thomas Durt (Centre for Quantum Dynamics, Griffith University)

Christopher Fuchs (Perimeter Institute for Theoretical Physics)

Rodolfo Gambini (Louisiana State University)

Daniel Greenberger (City College of New York)

Richard Healey (The University of Arizona)

Adrian Kent (University of Cambridge) --- to be confirmed

Simon Kochen (Princeton University)

Paul Kwiat (University of Illinois at Urbana-Champaign)

Fotini Markopoulou (Perimeter Institute for Theoretical Physics)

Argyris Nicolaidis (Aristotle University of Thessaloniki)

Sandu Popescu (University of Bristol)

Lee Smolin (Perimeter Institute for Theoretical Physics) --- to be confirmed

Tejinder Singh (Tata Institute of Fundamental Research, Mumbai)

Umesh Vazirani (University of California, Berkeley)

Vlatko Vedral (University of Oxford)

Alexandre Zagoskin (Loughborough University)

Wojciech Zurek (Santa Fe Institute)

Guest Participants:

Andrew Briggs (University of Oxford)

Jeremy Butterfield (University of Cambridge)

George Ellis (University of Cape Town)

Andrew Steane (University of Oxford)

Stig Stenholm (KTH Royal Institute of Technology Stockholm)

Jos Uffink (University of Utrecht)

For more information about the grant program, please visit:

http://www.templeton.org/what-we-fund/funding-priorities/quantum-physics-and-the-nature-of-reality

Logistics:

The meeting will take place at the International Academy Traunkirchen:

Address: Verein Internationale Akademie Traunkirchen Klosterplatz 2

4801 Traunkirchen, Austria



All logistics and travel reimbursement related inquiries should be directed to the International Academy Traunkirchen: Ms. Andrea-Margarethe Aglibut [andrea.aglibut@univie.ac.at].

Travel:

The participants are responsible for making their own travel arrangements. Your travel expenses (economy airfare, ground transportation, etc.) for the meeting will be reimbursed by the Foundation through the International Academy Traunkirchen upon submission and approval of completed reimbursement form, accompanied by expense receipts.

In an effort to coordinate ground transportation to and from local airport to the Academy whenever possible, please confirm your place of arrival/departure as well as arrival/departure date and time with Ms. Aglibut by April 30, 2011.

Please refer to the attached travel information document from the Academy for the details of travel arrangement, as well as the attached travel reimbursement form for the information needed for reimbursement.

For more information about the grant program, please visit: http://www.templeton.org/what-we-fund/funding-priorities/quantum-physics-and-the-nature-of-reality

JOHN TEMPLETON FOUNDATION

Accommodation:

The participants will be accommodated either at Hotel Post, Hotel Traunsee or Alpenhotel Altmünster (with shuttle service to the meeting venue). The accommodation costs will be covered by the Foundation. Please note that we cannot accommodate lodging preference, however, any special needs should be communicated to the Academy.

Hotel Post

Ortsplatz 5, 4801 Traunkirchen Tel. +43 7617 230 707 617-23 post@traunseehotels.at www.hotel-post-traunkirchen.at

Alpenhotel Altmünster

Hauptstraße 28, 4813 Altmünster Tel. +43 7612 87377 alpenhotel@traunseehotels.at www.alpenhotel-traunsee.at

Hotel Traunsee

Klosterplatz 4, 4801 Traunkirchen Tel. +43 7617 2216 Fax +43 7617 3496 <u>traunsee@traunseehotels.at</u> www.dastraunsee.at

For more information about the grant program, please visit: http://www.templeton.org/what-we-fund/funding-priorities/quantum-physics-and-the-nature-of-reality