

平成 29 年 7 月 20 日

サイエンス・ダイアログ 実施報告書

1. 学校名・担当者氏名: 兵庫県立川西緑台高等学校
2. 講師氏名: ERKKA HAAPASALO
3. 同行者氏名: Ikko Hamamura
4. 実施日時: 平成 29 年 7 月 18 日 (火) 11:40 ~ 12:40
5. 参加生徒: 3 年生 38 人、 年 年生 人、 年 年生 人 (合計 人)
備考: (例: 理数科の生徒)
6. 講演題目: How some persistent problems of classical physics resulted in solutions that finally lead to quantum physics.
7. 講演概要: First, I am going to tell something of myself, Finland, and my hometown Turku. I will briefly discuss school and student life in Finland and describe what made me interested in quantum physics and what made me to come to Japan. Then I am going to describe how some persistent problems of classical physics resulted in solutions that finally lead to quantum physics. Next I will describe how quantum and classical descriptions of the world differ. I am not going in the details since explaining the theory and mathematics involved would be far too time consuming. I am going to discuss uncertainty in quantum theory and, in conjunction with this, briefly describe a problem that I am currently working on, quantum incompatibility. However, I only give an informal description of what this is. Then I will discuss critique and perceived problems in quantum physics. Unfortunately, I cannot really give any demonstrations (at least, I cannot think of any), but I will discuss a 'gambling'-problem that has no classical solution but which can always be won using a quantum strategy.
8. 使用言語: English
9. 講演形式:
 - (1) 講演時間 60 分 質疑応答時間 5 分
 - (2) 講演方法 (例: プロジェクター使用による講演、実験・実習の有無など)
プロジェクター使用による講演
 - (3) 通訳 (例: 同行者によるサポート、外国人研究者本人による日本語説明)
同行者によるサポート
 - (4) 事前学習時使用教材(事前学習を行った場合のみ)
10. その他特筆すべき事項: