

**[H2020-ARIEL] "TRIGA  
MAINZ Lab Course on Reactor  
Operation and Nuclear  
Chemistry"**

**Report of Contributions**

Contribution ID: 46

Type: **not specified**

## Get-together reception

*Sunday 19 November 2023 18:00 (2 hours)*

Contribution ID: 53

Type: **not specified**

## Welcome adress

*Monday 20 November 2023 09:00 (10 minutes)*

Contribution ID: 54

Type: **not specified**

## **Instructions on safety and radiation protection**

*Monday 20 November 2023 09:10 (20 minutes)*

Contribution ID: 55

Type: **not specified**

## **Lecture: Basic reactor physics (C. Geppert)**

*Monday 20 November 2023 09:30 (1 hour)*

Contribution ID: **56**

Type: **not specified**

**Test**

Contribution ID: 57

Type: **not specified**

## **Lecture: The OKLO Phenomenon: The Natural Nuclear Fission Reactor in Gabon, Africa**

*Monday 20 November 2023 11:00 (1h 30m)*

Contribution ID: 58

Type: **not specified**

## **Lecture: The research reactor TRIGA Mainz (K. Eberhardt)**

*Monday 20 November 2023 13:30 (1 hour)*



Contribution ID: 59

Type: **not specified**

## **Lecture: TRIGA reactor control panel (C. Geppert)**

*Monday 20 November 2023 14:30 (30 minutes)*

Contribution ID: **60**

Type: **not specified**

**Group 1: 1.1 - Reactor start-up procedure 1.2 -  
Lecture: Production of ultra-cold neutrons at the  
TRIGA Mainz**

*Monday 20 November 2023 15:00 (2 hours)*

Contribution ID: **61**

Type: **not specified**

## **Group 2: 2.1 - Lecture: Production of ultra-cold neutrons at the TRIGA Mainz 2.2 - Reactor start-up procedure**

*Monday 20 November 2023 15:00 (2 hours)*

Contribution ID: 62

Type: **not specified**

**Lecture: The Discovery of nuclear fission (T. Reich) /  
Introduction to the experiments (C. Geppert, K.  
Eberhardt)**

*Tuesday 21 November 2023 09:00 (1 hour)*

Contribution ID: 63

Type: **not specified**

## **Introduction to the experiments (C. Geppert, K. Eberhardt)**

Contribution ID: 64

Type: **not specified**

## **Group 1 - Steady state reactor operation @ 10 W / Reactivity experiment with Cd samples**

*Tuesday 21 November 2023 10:00 (2 hours)*

Contribution ID: 65

Type: **not specified**

## **Group 2 - Reactivity experiment with Cd samples / Steady state reactor operation @ 10 W**

*Tuesday 21 November 2023 10:00 (2 hours)*

Contribution ID: 66

Type: **not specified**

**Group 1 - Pulse mode operation (up to 200 MW peak power) / Reactor pulse time structure Visual inspection reactor pool**

*Tuesday 21 November 2023 13:00 (3 hours)*



Contribution ID: 67

Type: **not specified**

**Group 2 - Reactor pulse time structure Visual  
inspection reactor pool / Pulse mode operation (up to  
200 MW peak power)**

*Tuesday 21 November 2023 13:00 (3 hours)*

Contribution ID: **68**

Type: **not specified**

## **Discussion of the experimental results**

*Tuesday 21 November 2023 16:00 (1 hour)*

Contribution ID: **69**

Type: **not specified**

## **Lecture: Activation experiments for nuclear astrophysics studies (T. Heftrich)**

*Wednesday 22 November 2023 09:00 (1h 30m)*

Contribution ID: 70

Type: **not specified**

## **Lecture: Application of research reactors (N. Passeo Barradas)**

*Wednesday 22 November 2023 11:00 (1h 30m)*

Contribution ID: 71

Type: **not specified**

## **Introduction to the experiments**

*Wednesday 22 November 2023 13:30 (30 minutes)*

Contribution ID: 72

Type: **not specified**

## **Group 1 - Decay scheme of Os-190m / Measurement of $\beta$ -delayed neutrons**

*Wednesday 22 November 2023 14:00 (2h 30m)*

Contribution ID: 73

Type: **not specified**

## **Group 2 - Measurement of $\beta$ -delayed neutrons / Decay scheme of Os-190m**

*Wednesday 22 November 2023 14:00 (2h 30m)*

Contribution ID: 74

Type: **not specified**

## **Discussion of the experimental results**

*Wednesday 22 November 2023 16:30 (30 minutes)*



Contribution ID: 75

Type: **not specified**

## **Radiation protection measures: Practical exercises**

*Thursday 23 November 2023 09:00 (1h 30m)*

Contribution ID: 76

Type: **not specified**

## Introduction to the experiments

*Thursday 23 November 2023 13:00 (30 minutes)*

Contribution ID: 77

Type: **not specified**

## **Experiments on the discovery of nuclear fission**

*Thursday 23 November 2023 13:30 (3 hours)*

Contribution ID: 78

Type: **not specified**

## **Discussion of the experimental results**

*Thursday 23 November 2023 16:30 (30 minutes)*

Contribution ID: 79

Type: **not specified**

## **Lecture: Neutron Activation Analysis (C. Stieghorst)**

*Friday 24 November 2023 09:30 (1h 30m)*

Contribution ID: **80**

Type: **not specified**

## **Final discussion**

*Friday 24 November 2023 11:00 (1 hour)*