

## **MLF SAFETY**

J-PARC MLF / KEK IMSS Toshiya Otomo





## **Materials and Life Science Division**

## **Neutron Instrumentation and Promoting Science**

# Neutron Science S.

Leader : Yukinobu Kawakita Sub-Leader: Mitsutaka Nakamura

Sub-Leader: Tetsuya Yokoo

JAEA total 43 members
22 Staffs
PD+ Students 15 members
Technician 3 members
Officer 3 members
KEK total 27 members
12 staffs
PD+ Students 4+5
Engineer 6

Introduction and grade-up of common equipment and SEs Grade-up and application of <sup>3</sup>He spin filter

## Neutron Instrumentation

S.

Leader: Tatsuya Nakamura

8 staffs (JAEA)

## R & D on neutron detectors and devices

CROSS Ibaraki Pref

## Materials and Life Science Division

Div. Head : Toshiya Otomo

Deputy D Head: Kazuhiko Soyama Deputy D Head: :Kazuya Aizawa

Deputy D Head: : Koichiro Shimomura

# Neutron Source S.

Leader : Katsuhiro Haga

Sub-Leader: Kenji Sakai

31 staffs (JAEA)

Operation, maintenance and management of spallation neutron source and quantum beam transfer line and R & D of their related technology

# Technology Development S.

Leader: Takayuki Oku

16 staffs (JAEA)
2 staffs (KEK)

### Muon S.

Leader Ryosuke Kadono

Sub-Leader: Naritoshi Kawamura

31 Staffs (KEK)

R & D of muon target, beamlines and spectrometers

User support and cur g-edge studies by using muon

## MLF consists of several organizations

- MLF division (JAEA and KEK staff)
  - Neutron Source section
  - Neutron Science section
  - Neutron Instrumentation section
  - Technology Development section
  - Muon section
- CROSS
- Ibaraki Prefecture + Ibaraki Univ.

An integrated system is necessary to ensure safety. Task teams formed across organizations

## Task teams

- Computing Environment
- Electrical safety
- Chemical safety
- Radiation safety
- Equipment safety
- Laser safety
- Gas safety (mainly pressurized gas)

# SAFETY IN NORMAL OPERATION

## Safety Review system of MLF

- Perform risk assessment with several levels
- MLF division head will request review in J-PARC wide members
- "3H" is common words for risk management ("Hajimete" (first time), "Henkou" (change), "Hisashiburi" (it's been a while))

J-PARC Radiation Safety ReviewJ-PARC General Safety Review

## **5**MLF Safety Review

 MLF division head appoint members including staff of other divisions.

**4**MLF Meeting

#### instruction

MLF division head (and deputy head)

ead) Request Revie

instruction

2 Safety review of proposals

(safety of users)

## 1 Section Meeting

- Section leader will perform risk assessment for experiments and operations. Report the risk to MLF meeting.
- · Request MLF safety review as necessary

(safety of staff)

Report and reques

**Section members** 

## **3**Floor Manager

- Section leader will perform risk assessment and report the risk to MLF meeting.
- Request MLF safety review as necessary.

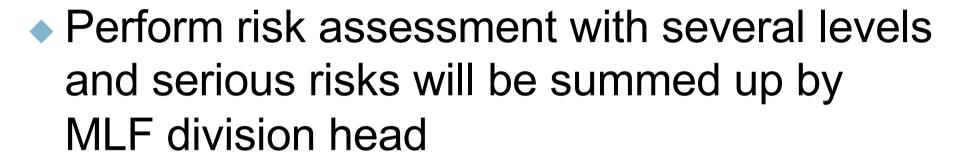
(safety of contractor)

Report and request

MLF work scheduling

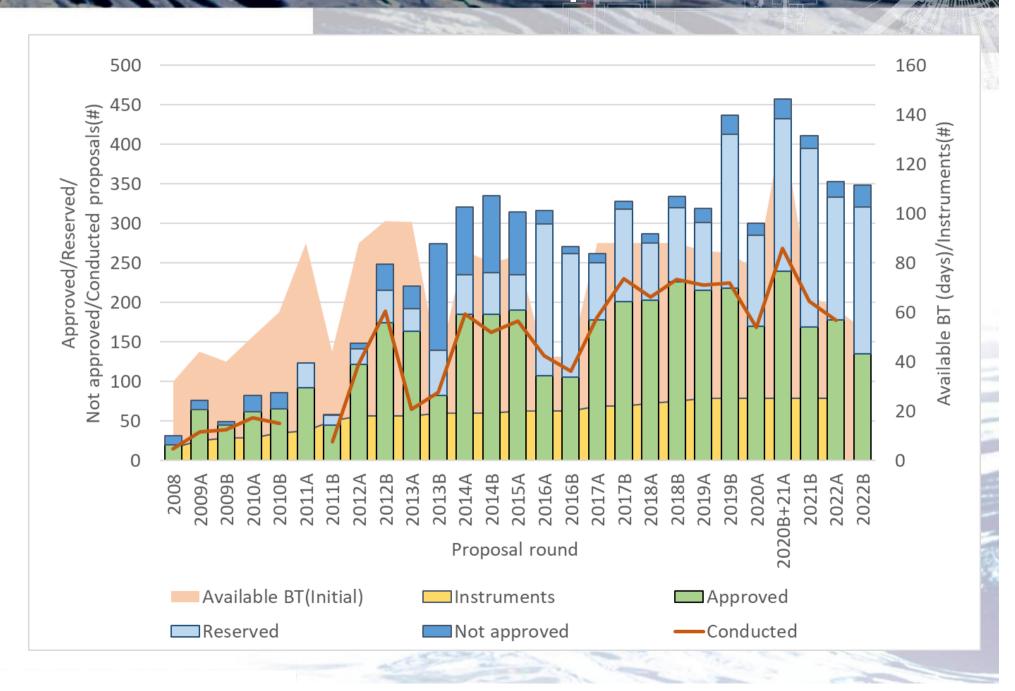
Report and request

Safety task team



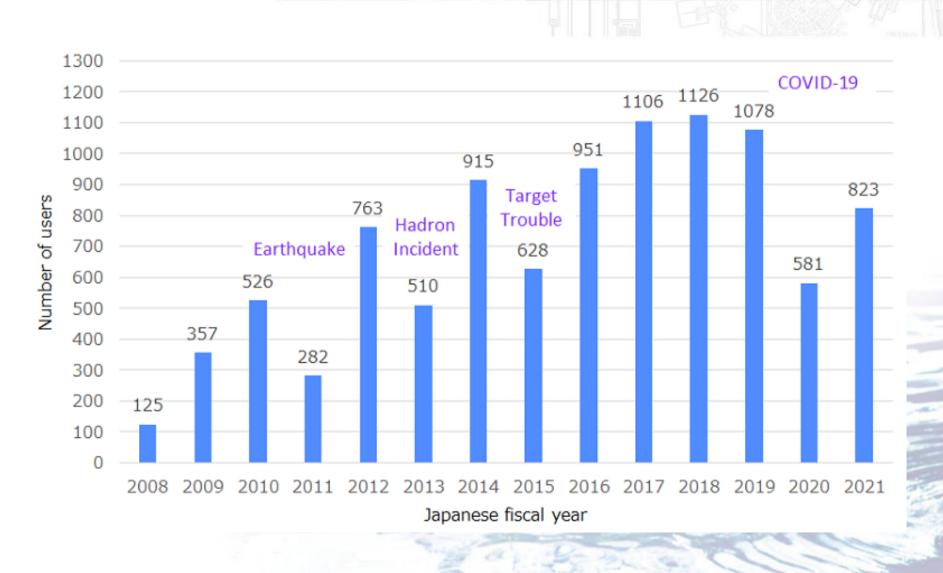
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# Number of Proposals



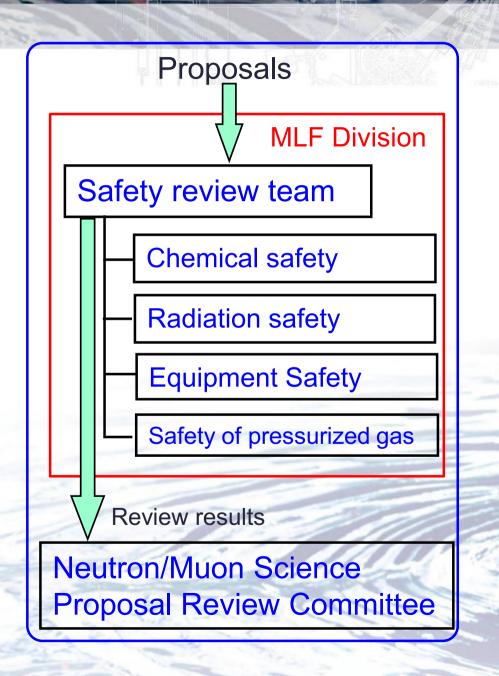
# Unique No. of Users of MLF<sup>RC, MLF</sup>

https://mlfinfo.jp/ja/aboutmlf/statistics.html



# Safety review of proposals

- Risk of each proposal will be assessed as well as scientific merit
- PI of accepted proposal should address identified risks



# **EMERGENCY OPERATION**

# Emergency operation

- Annual drill of emergency operation
  - Fire
  - Radiation exposure
  - Abnormal release of radioactive materials