



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

FUSION23: Welcome and introduction

Kouichi Hagino (Kyoto University)
Katsuhisa Nishio (JAEA)





FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023



FUSION17
Hobart, Australia
Feb. 20-24, 2017

FUSION20
Shizuoka, Japan
Nov. 18-22, 2020

FUSION23
Shizuoka, Japan
Nov. 19-24, 2023



postponed twice due to covid19



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023



FUSION17
Hobart, Australia
Feb. 20-24, 2017

after 6.5 years

FUSION23
Shizuoka, Japan
Nov. 19-24, 2023

many new (preliminary)
ideas and developments

- ✓ establishments of the ideas
- ✓ new ideas



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

Conference Topics:

- Fusion dynamics
- Superheavy elements: synthesis methods, structure, and chemistry
- Fission and quasi-fission dynamics
- Transfer reactions and deep-inelastic collisions
- Near-barrier collisions with weakly bound and unstable nuclei
- Tunneling: deep sub-barrier fusion and spontaneous fission
- Nuclear reactions relevant to astrophysics: fusion, fission, and transfer
- Accelerators and instrumentation for reactions around the barrier
- Theoretical developments in fusion and large amplitude collective motions
 - ✓ a wide range of topics on fusion/fission
 - ✓ about 100 participants → "informal" atmosphere



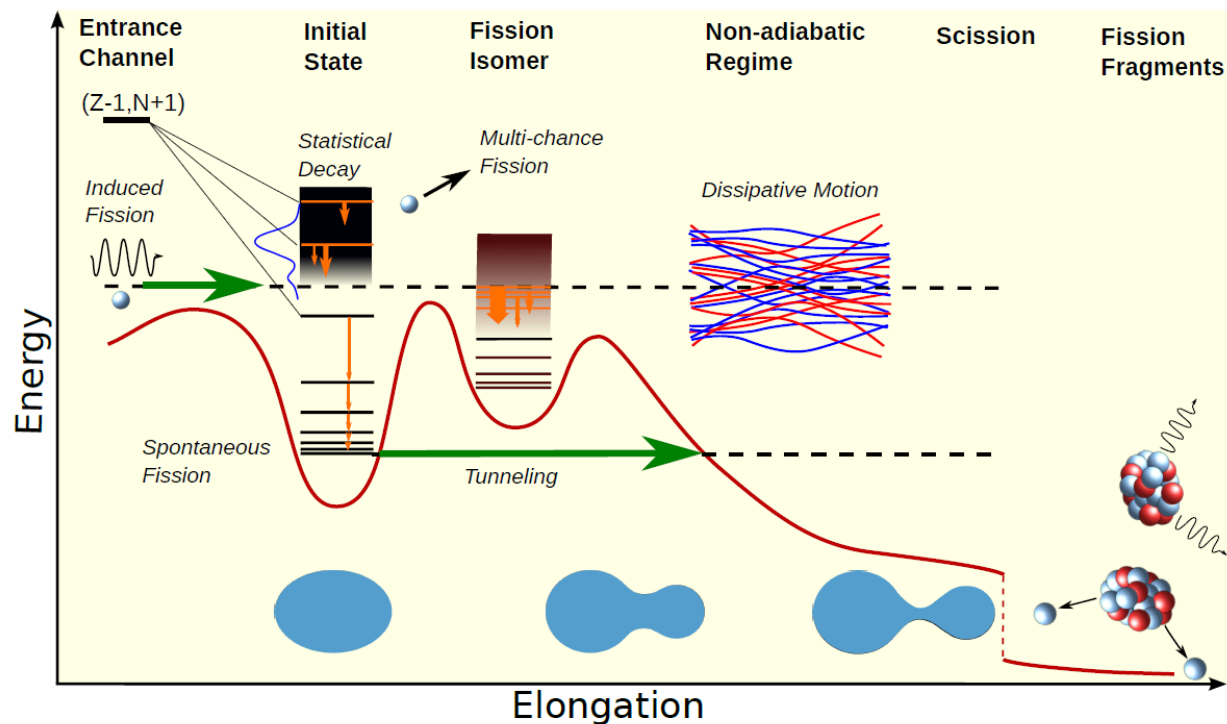
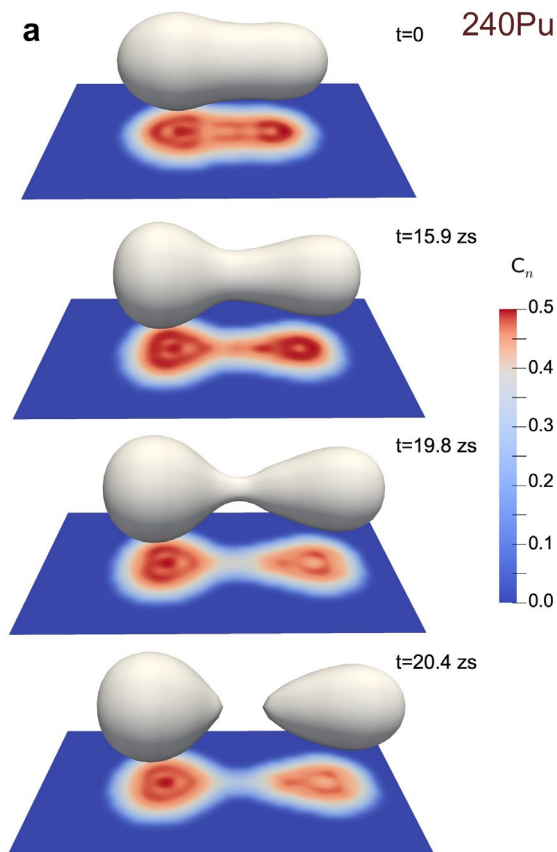
FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

Conference Topics:

- Fusion dynamics
- Superheavy elements: synthesis methods, structure, and chemistry
- **Fission and quasi-fission dynamics**
- Transfer reactions and deep-inelastic collisions
- Near-barrier collisions with weakly bound and unstable nuclei
- Tunneling: deep sub-barrier fusion and spontaneous fission
- Nuclear reactions relevant to astrophysics: fusion, fission, and transfer
- Accelerators and instrumentation for reactions around the barrier
- Theoretical developments in fusion and large amplitude collective motions
 - ✓ a wide range of topics on fusion/fission
 - ✓ about 100 participants → "informal" atmosphere

a microscopic description of nuclear fission : an ultimate goal of nuclear physics



G. Scamps and C. Simenel,
Nature 564 (2018) 382

M. Bender et al.,
J. of Phys. G47, 113002 (2020)

“Future of fission theory” White paper



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

Conference Structure:

- Nov. 20 (Mon) Opening
- Nov. 21 (Tue) Poster session
- Nov. 22 (Wed) Excursion and Banquet
- Nov. 24 (Fri) Closing



Shizuoka (静岡 : a calm hill)



Mt. Fuji



sea foods



green tea



plastic models



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

Early career researcher prizes for students and young postdocs

Noboru Takigawa prize (the best talk prize)

Mahir Hussein prize (the best poster prize)



Noboru Takigawa
(1943-2022)



Mahir S. Hussein
(1944-2019)

Sponsors



NIKI GLASS CO.,LTD.

TechnoAP



CLEAR-PULSE



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies

Shizuoka, Japan, 19-24 November 2023

a secret in our logo





FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

a secret in our logo



Mt. **FUJI**



Fuji (富士) = 不死

an eternal life

Mt. Fuji yesterday



14:45



16:30



FUSION23

International Conference on Heavy-Ion Collisions at near-barrier energies
Shizuoka, Japan, 19-24 November 2023

a secret in our logo



Mt. **FUJI**



Let us hope that we will be able to see Mt. Fuji everyday!
We hope you will enjoy the conference and Shizuoka!