Science & Technology Facilities Council

Muon Impact Brochure and Ray Diagram

Science & Technology Facilities Council

The Neutron Science Fan Diagram

Science & Technology Facilities Council

Neutron Science Impact Brochure

Science & Technology Facilities Council

Muon

Energy

- Batteries
  - Hydrogen Economy
  - Solar cells
  - Muon Catalysed Fusion
- Ionic motion
  - Muon implantation
  - Nuclear physics

Environment

- Waste Heat
  - Photochemistry
- Conduction Mechanisms
  - Photo excited Spin relaxation

Functional Materials

- Solar Devices
  - Vacancy Kinetics
  - Alloy Hardness
  - Composition studies
- hydrogen dissociation
  - muon trapping
  - Non-destructive elemental analysis

Cultural Heritage

- Alloying Techniques
  - Composition Studies
  - Depth profiling
- Negative muons
  - X-ray emission
  - non-destructive elemental Analysis

Electronics / IT

- Semiconductors
  - Cosmic Interference
- Spin transport
  - Impurity effects
  - Single event upsets (SEUs)

Chemistry

- Radicals
  - Catalysis
  - Vibrational States
  - Reaction Kinetics
- Radical structure and dynamics
  - Spin repolarisation
  - hyperfine coupling constants
  - Radio-frequency methods

Bioscience

- Antioxidants
  - Bio-electronics
  - Molecular Dynamics
- Radical formation/ Reaction kinetics
  - Ion Conduction
  - Electron transfer

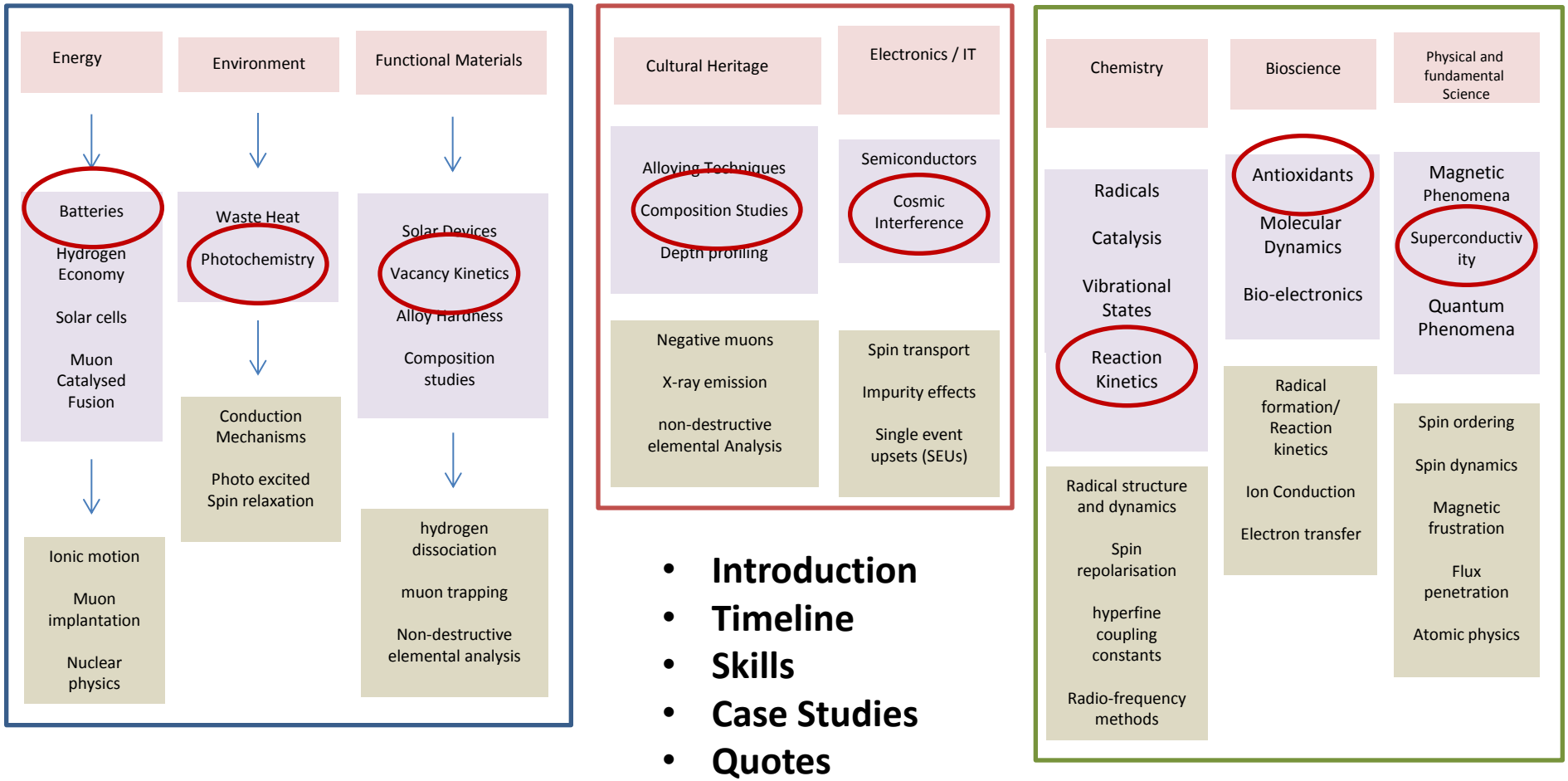
Physical and fundamental Science

- Magnetic Phenomena
  - Superconductivity
  - Quantum Phenomena
- Spin ordering
  - Spin dynamics
  - Magnetic frustration
  - Flux penetration
  - Atomic physics

- **Introduction**
- **Timeline**
- **Skills**

Science & Technology Facilities Council

Muon



- **Introduction**
- **Timeline**
- **Skills**
- **Case Studies**
- **Quotes**

Science & Technology Facilities Council

The Proposed Muon Ray Diagram