$\mu\mathcal{SR}$

Jess H. Brewer
Canadian Institute for Advanced Research
Department of Physics and Astronomy
University of British Columbia
and *TRIUMF*

In the past few decades, muon spin rotation/relaxation/resonance ($\mu\mathcal{SR}$) has become an indispensible experimental tool of condensed matter physics, chemistry and other material science disciplines. I will outline the basic physics and technology that make $\mu\mathcal{SR}$ possible, the principal $\mu\mathcal{SR}$ techniques and their main areas of application. Then I will stop for questions. If, after a short break, people want to hear more about one of the highlights of recent $\mu\mathcal{SR}$ work at TRIUMF, I will go into extra detail about whichever of the following subjects the audience chooses:

$\mu^{-}\mathcal{SR}$
$TF-\mu^{+}\mathcal{SR}$ and the Vortex Lattice
$ZF-\mu^{+}\mathcal{SR}$ and Magnetic Superconductors
Muon & Muonium States in Matter
Brewer Ad for Grads

See `http://musr.org/~jess/ppt/UNBC/` for pre- or postview.