

your compass through the hyperfine interaction world

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With jargon as *isomer*, *hyperfine splitting*, *fine structure*, *multiplet*,...and cryptic acronyms as *LTNO*, *CEMS*, *NVRS*, *NMR/ON*, *TDPAC*,... it is easy to get lost in the zoo of hyperfine interaction physics and hyperfine interaction methods – a zoo where Mössbauer spectroscopy has its place. This tutorial aims to be your compass through the world of hyperfine interaction methods. You will be guided through two diagrams that summarize the physics of hyperfine interactions and display the complementarity between the different experimental hyperfine methods (among which is Mössbauer spectroscopy). It will prepare you to make more sense out of the many research talks you will hear in the coming week. In order to practice what you learned, there will be a quiz/contest throughout the conference by which you can make the connection between the content of this tutorial and the content of some of the research talks at ICAME and HYPERFINE.

This tutorial is a teaser/digest/mini-version of www.hyperfinecourse.org, a 12-week online course on the physics of hyperfine interactions and the experimental methods based thereupon.