

<sup>1</sup>H HOMONUCLEAR EDITING USING STIMULATED ECHOESHana LAHRECH, André BRIGUETLaboratoire de RMN Université LYON I  
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Several approaches for proton NMR spectral editing have been recently developed as a tool for in vivo studies of metabolism by use of difference spectra [1-6]. We report here two editing schemes based on the stimulated echoes sequence (STE) and modified STE (MSTE) [7]. In both cases, data are acquired using homonuclear double resonance difference spectra with irradiation on resonance during alternate scans, while solvent suppression

is achieved using semi-selective pulses. Single scan editing (without difference spectra and second irradiation) may be also performed in the MSTE mode when spurious resonances (i.e. lipids) which overlap lines of interest (i.e. methyl lactate) have  $T_1/T_2$  ratio close to unity. Results presented here have been obtained at 300 MHz and demonstrate well the potentiality of the two approaches which may simultaneously be employed for spatial localization.

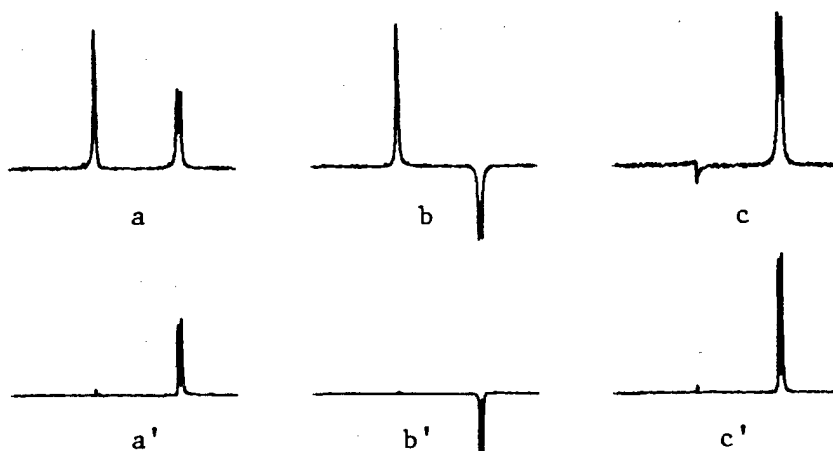


Figure 1. Water solution of N-Acetyl-Alanine 100 mM (methyl region only)

- (a) STE normal  
 (b) STE when quadruplet is irradiated  
 (c) difference a-b  
 (a',b',c') same experiments in the MSTE Mode

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