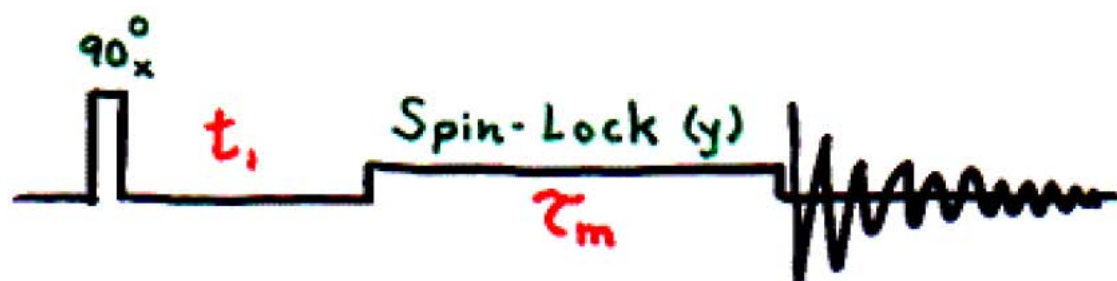


ROESY

Rotating Frame
Overhauser Effect Spectroscopy



Preparation: 90° ^1H pulse ($\sim 10 \mu\text{s}$)

Evolution: t_1 delay (0-50 ms in steps)

Mixing: Continuous-Wave (CW) low-power
RF irradiation (100-400 ms).

Detection: ^1H FID

Power Levels for RF:

| | | |
|-------------------------------|-----------------|--------------------------------|
| 100% | 1.4% | |
| $\gamma B_1 = 25 \text{ kHz}$ | 3 kHz | $\gamma B_0 = 500 \text{ MHz}$ |
| 90° pulse | spin-lock | |
| (rotating frame) | | (lab. frame) |