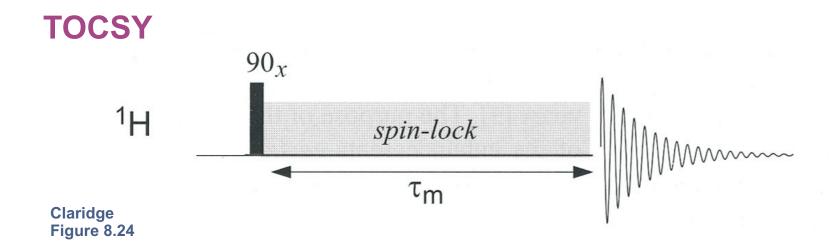
## **Review - TOCSY and Scalar Coupling**

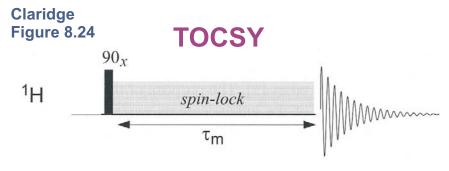
Spin-locking the magnetization scales the chemical shift to near-zero (in Hz), producing strong coupling.



## **Review - TOCSY and Scalar Coupling**

 Spin-locking the magnetization scales the chemical shift to nearzero (in Hz), producing strong coupling.

Strongly coupled protons exchange magnetization once every ~1/2J.



## **Figure 5.62** A schematic illustration of events during spin-lock mixing. All chemical shift differences between spins are eliminated yet all spin-spin couplings between them remain. This

Claridge

forces the *strong-coupling* condition on all spins (see text).

