

Double Pulsed Field Gradient Spin Echo: (DPFGSE)

- Use a Selective (Shaped) 180° Pulse in the Center:
 - $90^\circ(\text{Hard}) - G_z - 180^\circ(\text{Selective}) - G_z - \text{FID}$
 - Only the Selected Proton Gets a 180° Pulse
 - All Other Protons Just See Two Gradients: They Get a Double Twist and All Magnetization is Destroyed
- Developed by A.J. Shaka, Univ. of Calif. Irvine
- End Result: Selected Proton Net Magnetization is in the x - y Plane; Other Protons Have no Net Magnetization at All.
- Virtually All Selective 1D Experiments Now Start With DPFGE