EE 591: Magnetic Resonance Imaging and Reconstruction

Fall 2009 K. Nayak

## Homework #5 due Tuesday, October 13<sup>th</sup>, 2009

Reading: Nishimura, Chapter 7

## Problems:

- 1. Nishimura 6.5
- 2. SpinBench Programming: Run SpinBench, and load the example file called "Spin Echo". Convert the spin echo sequence to a double-spin echo sequence (90 180 echo #1 180 echo #2). Control the sequence using two "Time Intervals". *Hint: one can represent the period from the excitation to the first echo, and one can represent the period from the second echo.* Describe any interesting behaviour that occurrs when T2 < TE? and when T1 < TE? Submit screen-capture images for both cases.</p>
- 3. Nishimura 7.1
- 4. Nishimura 7.3
- 5. Nishimura 7.4
- 6. Nishimura 7.5
- 7. Nishimura 7.6
- 8. Nishimura 7.7