

Journal Discussion 8, Quiz #6: **Simonis et al., MRM 2016, Improving the Arterial Input Function in Dynamic Contrast Enhanced MRI by Fitting the Signal in the Complex Plane**

Name:

Due: Nov 12th at the beginning of class. Please turn in by hand, email, or submission to Learn@UW.

Question 1 (2.5 points)

1. What is the novelty / what is unique about the way the AIF is estimated in this article??

Question 2 (2.5 points)

2. What is used as a comparison for AIF values in the in vivo study? Is that a good surrogate for a gold standard?

Question 3 (2.5 points)

3. Why does the magnitude model overestimates S_0 ?

Question 4 (2.5 points)

Could complex signal fitting also be applied for concentration estimation in tissue? If so, what changes would have to be incorporated compared to fitting in arteries?