

# Computational Aerodynamics Questions & Answers

## Question by Student 201627128

*Professor, in class when you explained how to find WENO3, you found a highest degree polynomial through the data points. Using a similar approach I was able to find  $u_L$  equal to 4.5 as in the solutions, however, when I apply the same strategy to find  $u_R$ , I get 4.25 instead, which does not match the solution. I tried to do it in reconstruction evolution and again found 4.5 for  $u_L$  but this time  $u_R$  becomes 5. Is there a separate approach to find  $u_R$  ?*

I don't understand why using reconstruction-evolution would give you a different answer. You need to find  $u_R$  by interpolating  $u$ . Once  $u$  is interpolated and  $u_L$  and  $u_R$  are found, then apply reconstruction evolution.

## Question by Prasanna

*Professor, for assignment #7, question #3 (c), I did my calculation as follows: I get a slightly different answer from my calculation. However, the answer is the same as the one posted only if I choose the wavespeed  $a = u$  and not  $a = u/2$ .*

For  $f$  and  $u$  given, there is only one wave speed not two.