

# Modulator Simulations with Linear Focusing

Jun Ma, Roman Samulyak

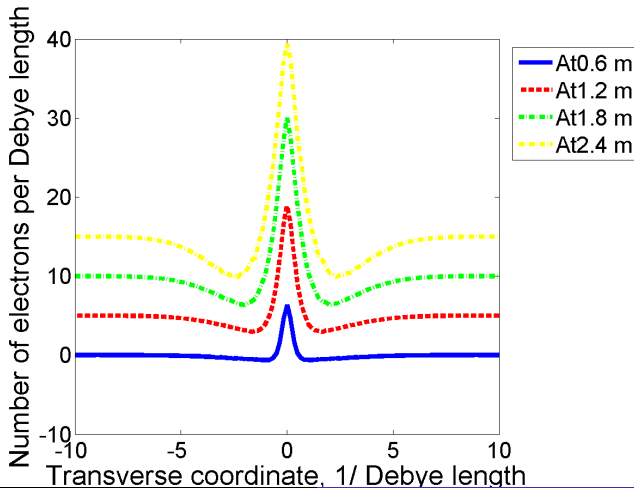
Department of Applied Mathematics and Statistics  
Stony Brook University

2016.11.10

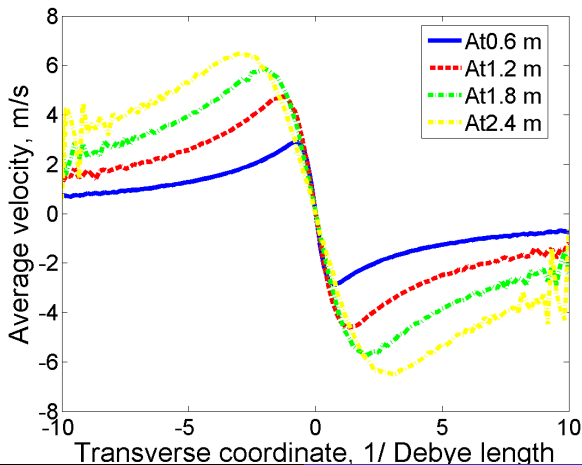
# Notations

- $n_z$  : Longitudinal density distribution along  $z$  axis
- $v_z$  : Longitudinal velocity distribution along  $z$  axis
- $n_x$  : Transverse density distribution along  $x$  axis
- $v_x$  : Transverse velocity distribution along  $x$  axis
- $n_y$  : Transverse density distribution along  $y$  axis
- $v_y$  : Transverse velocity distribution along  $y$  axis

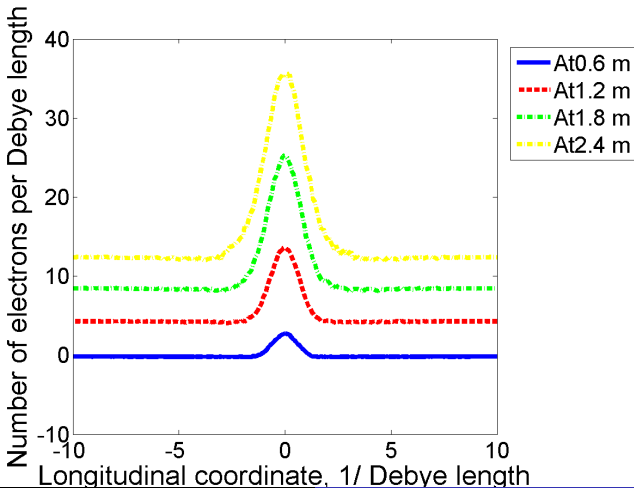
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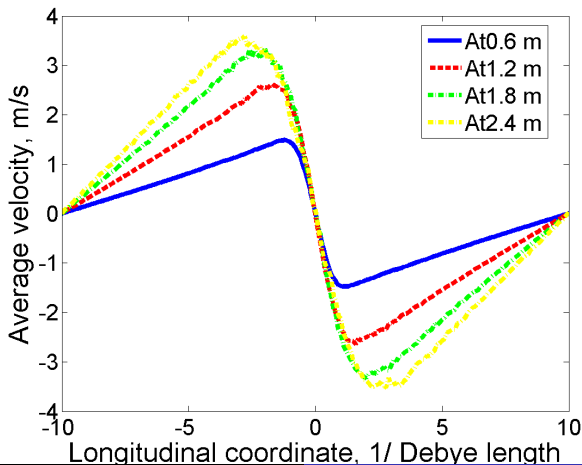
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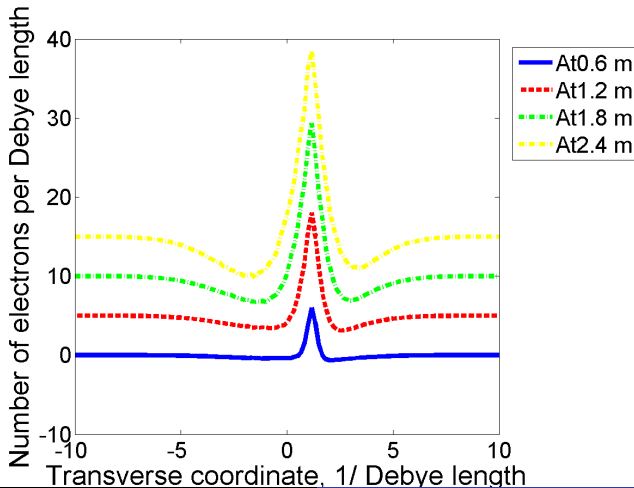
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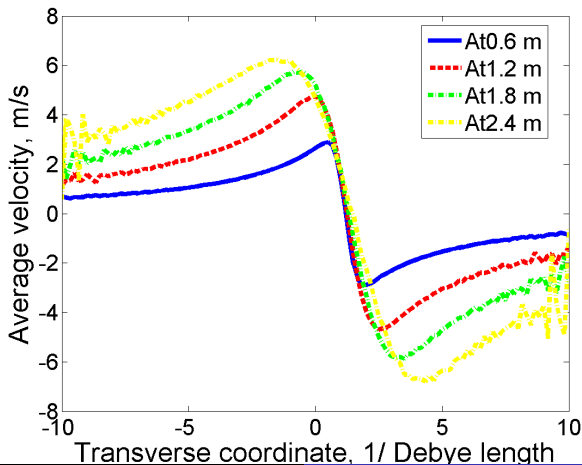
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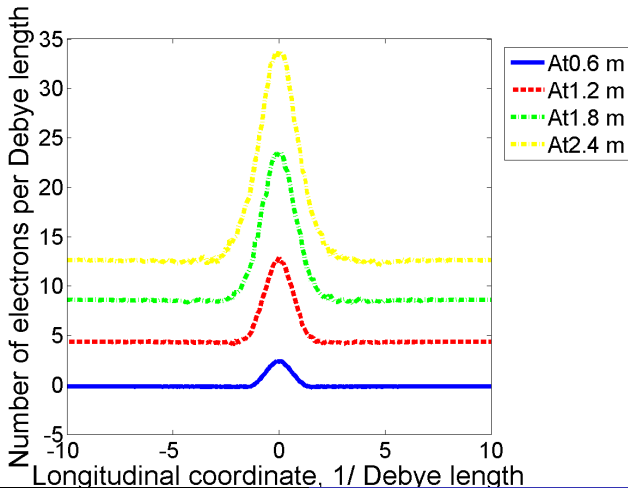


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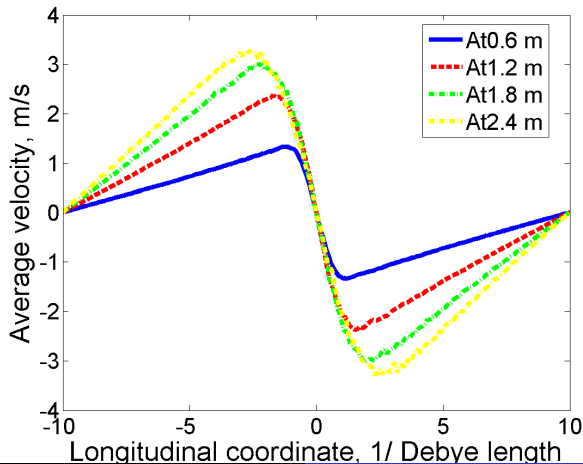




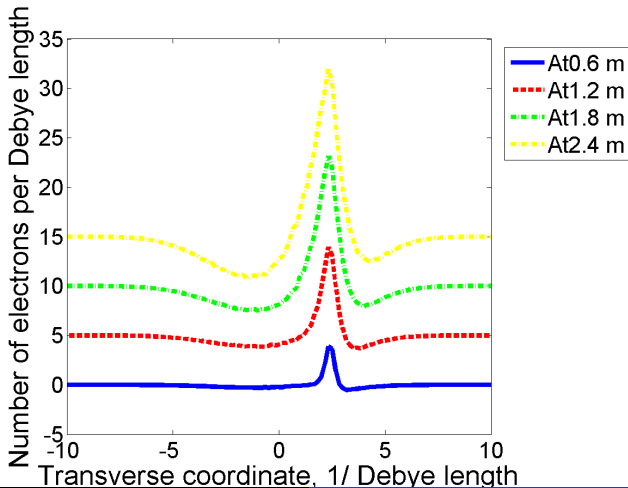
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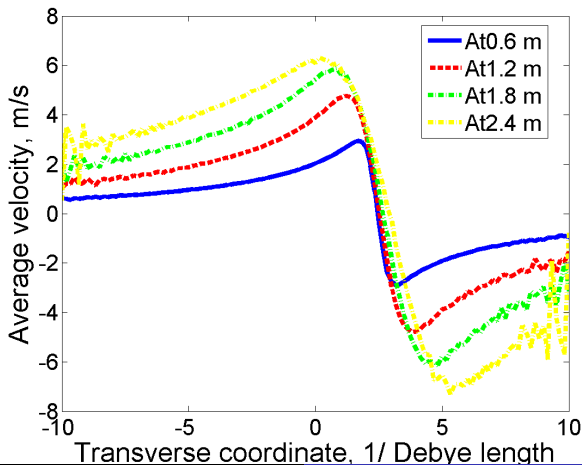
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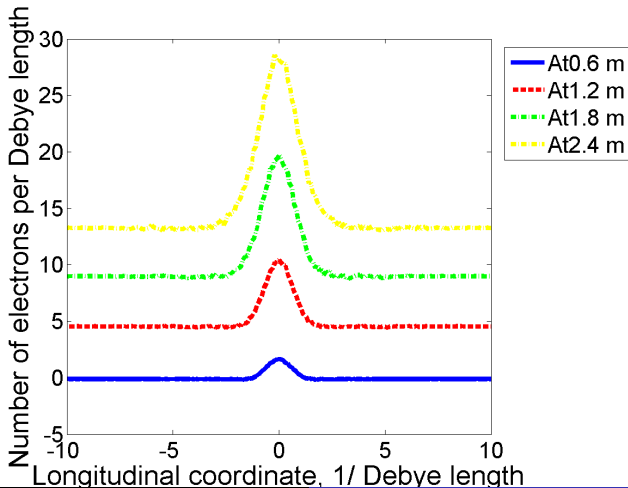
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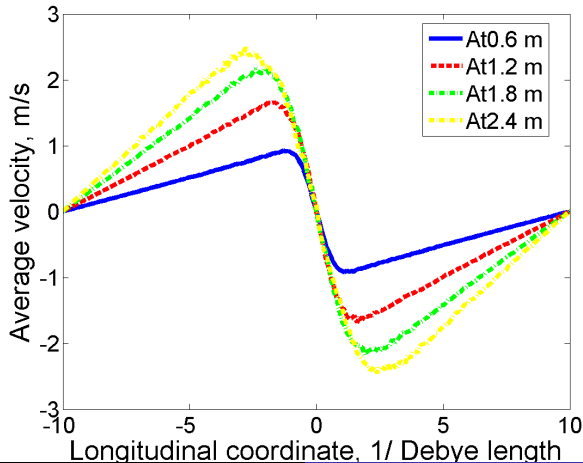
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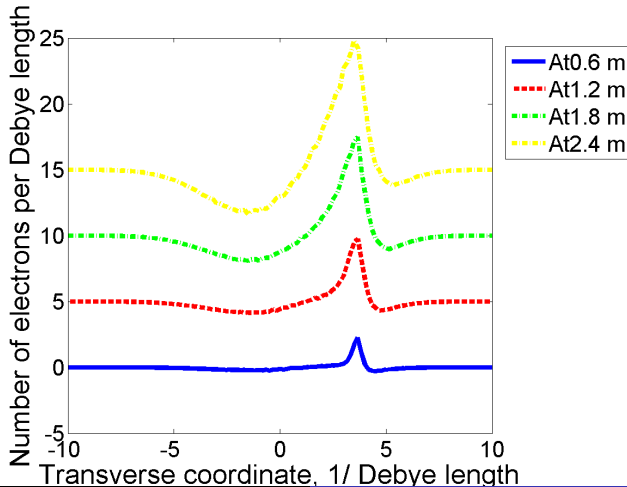
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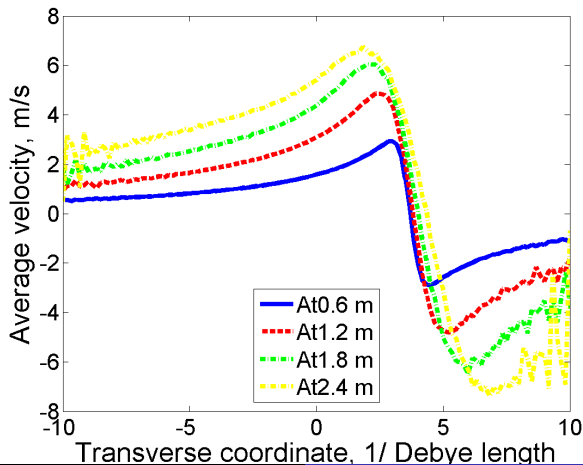
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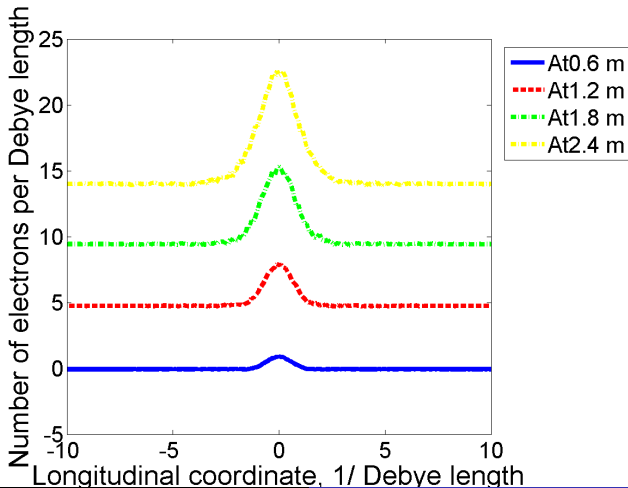


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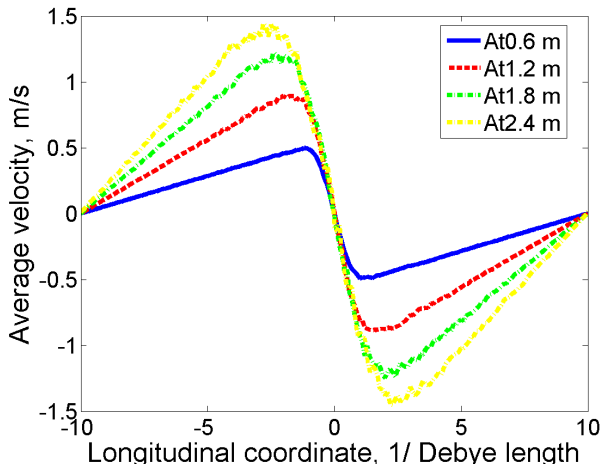




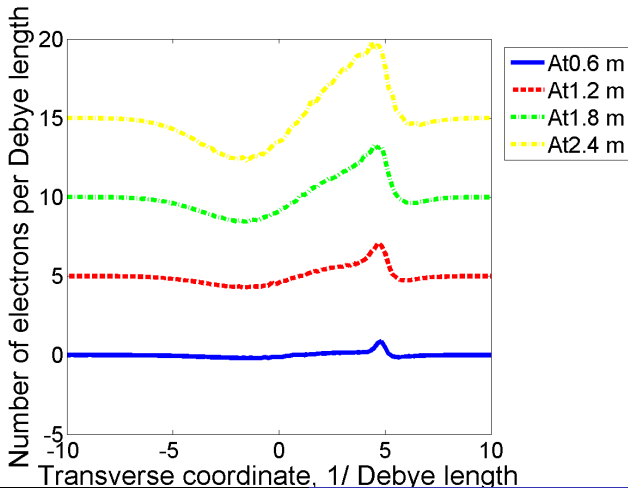
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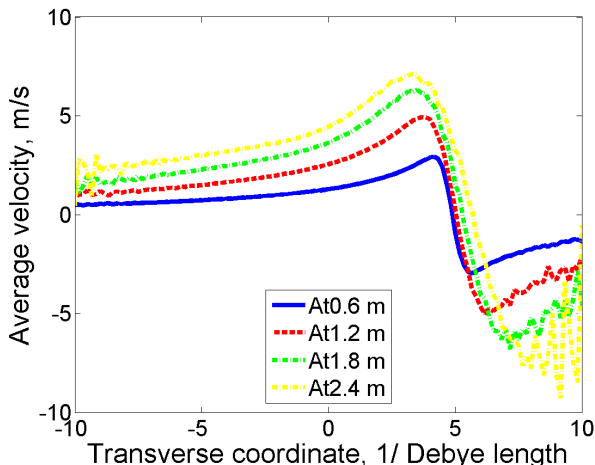
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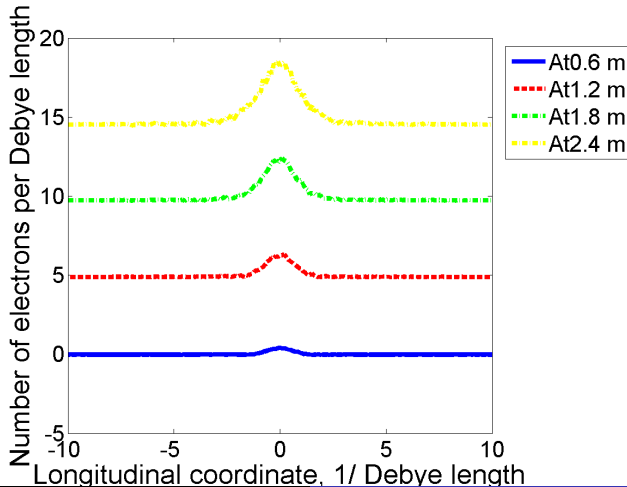


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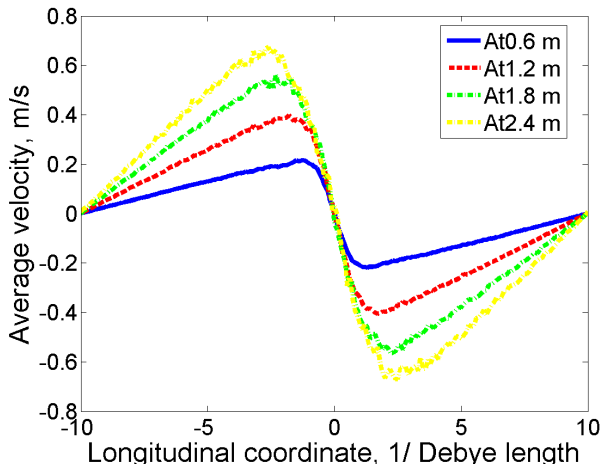


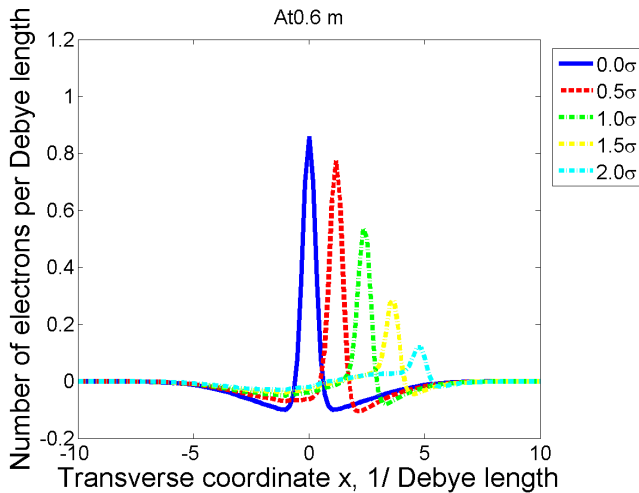
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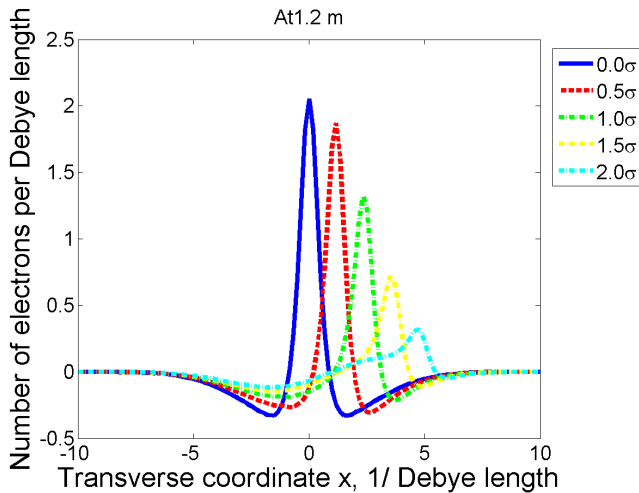


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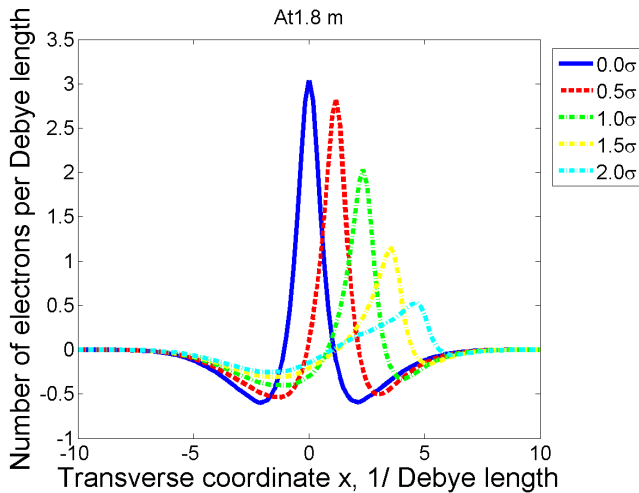
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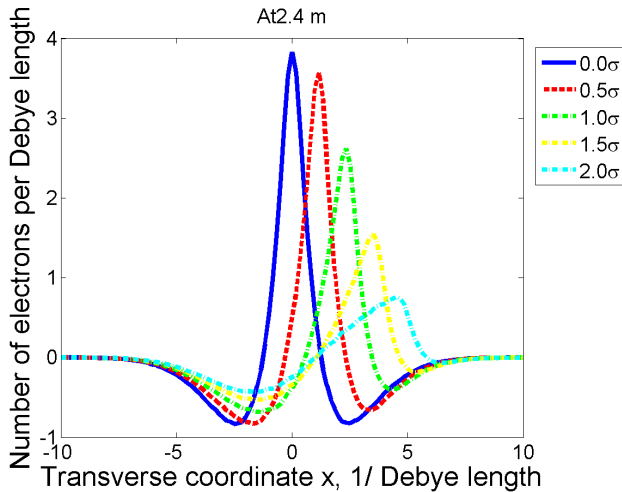


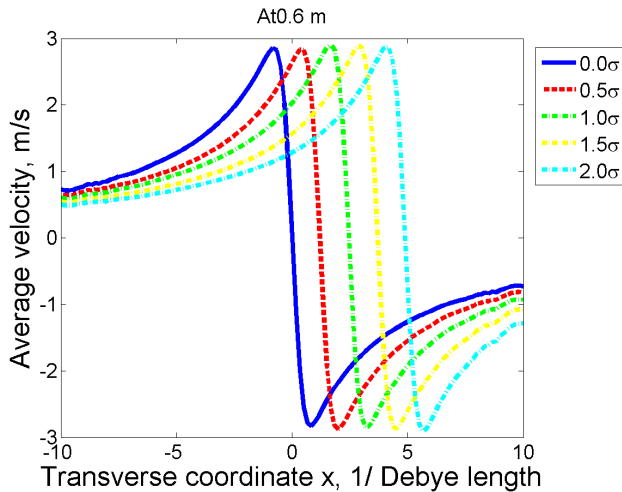


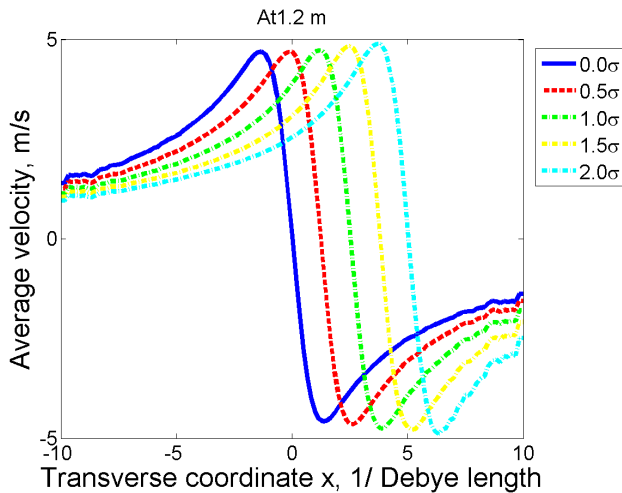


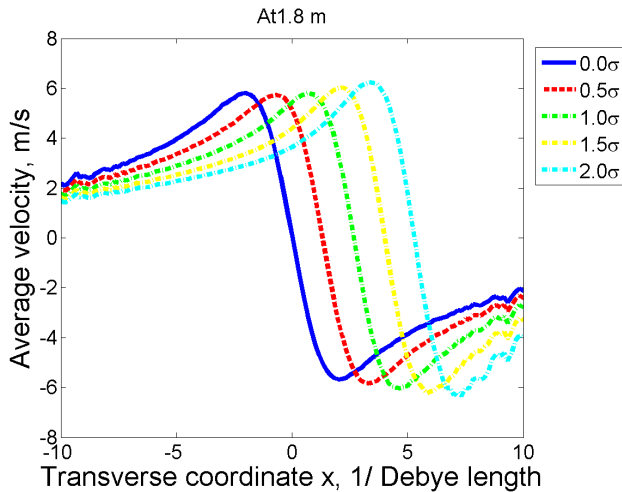


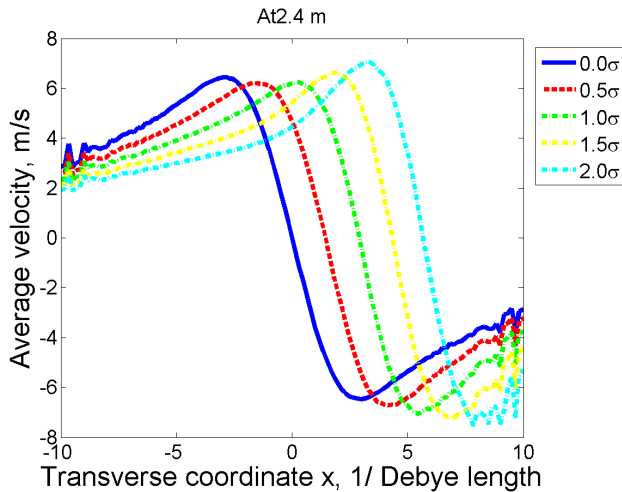


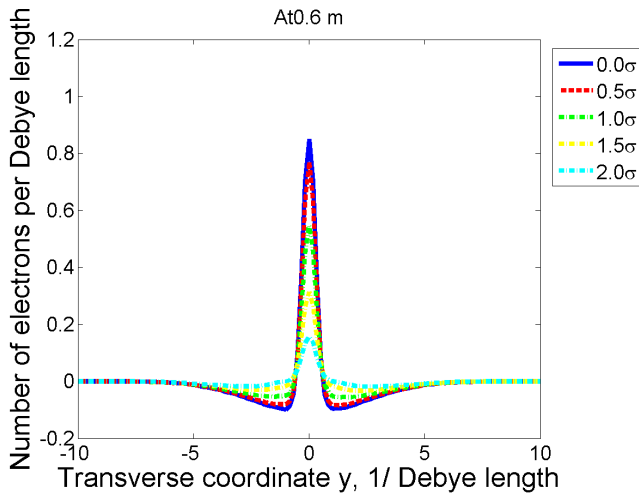


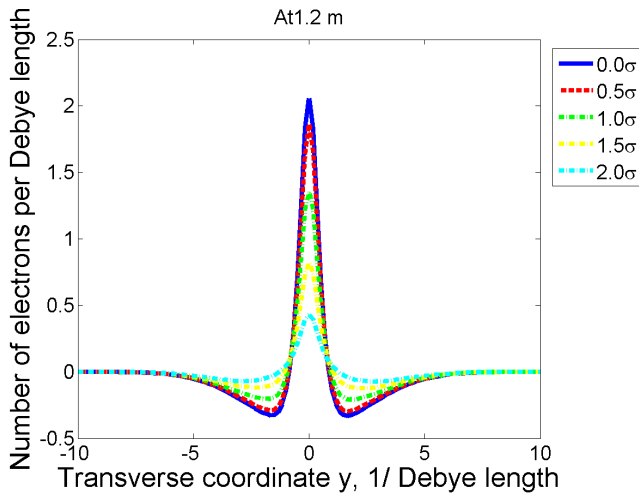




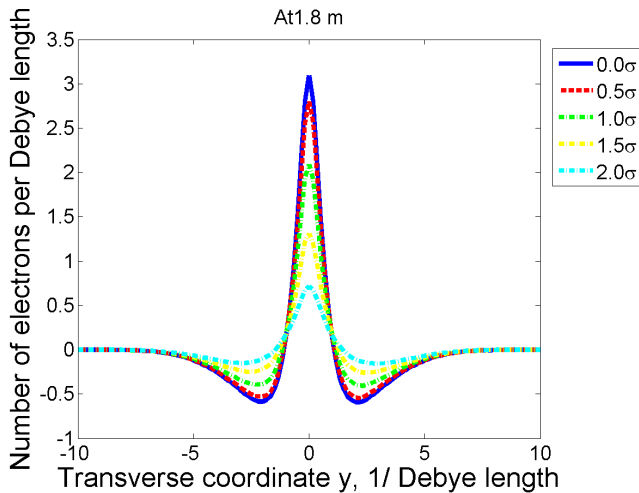


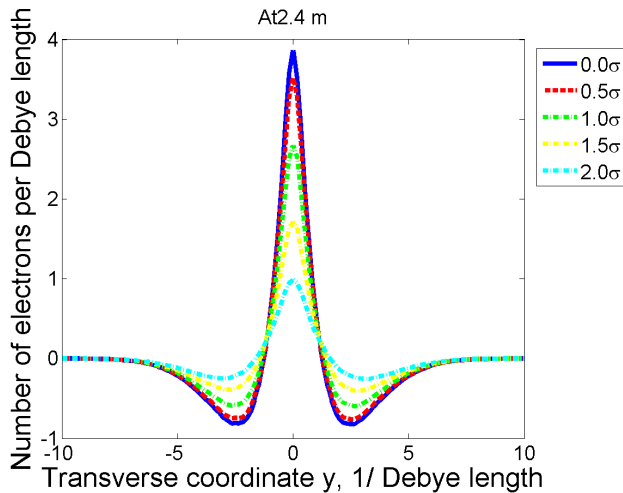


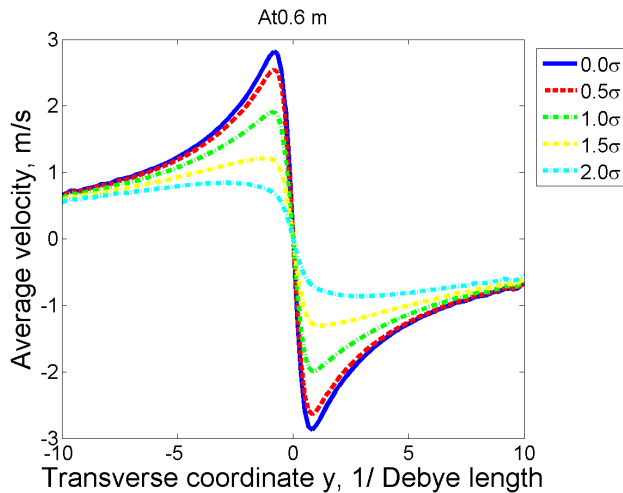


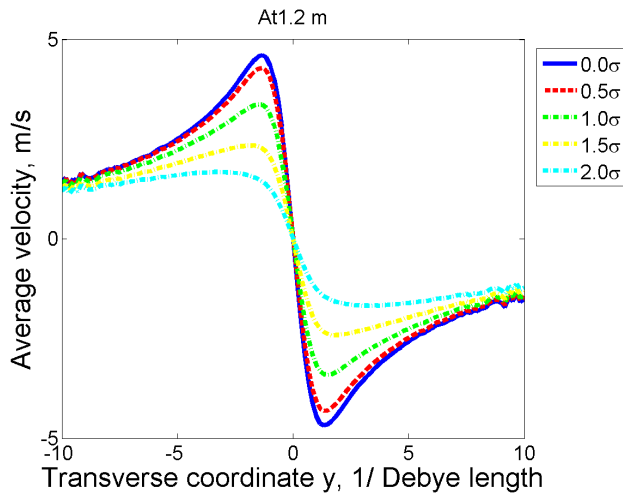


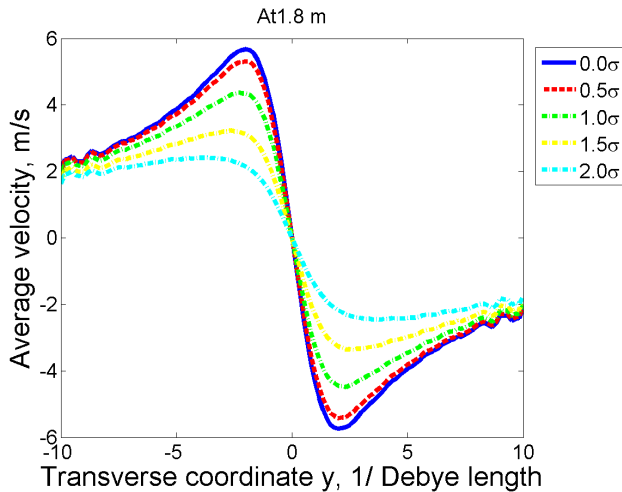


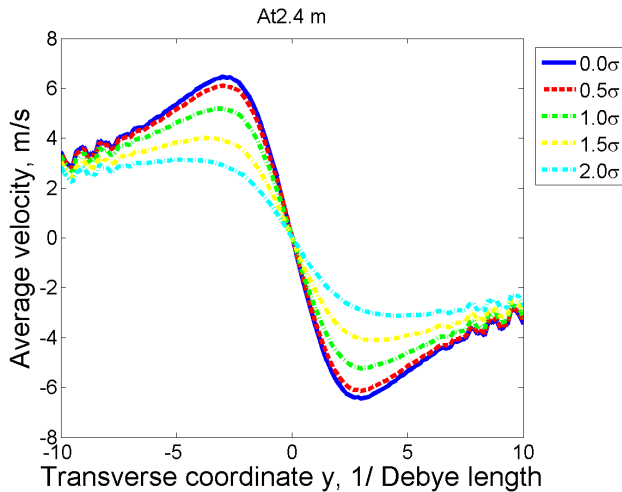


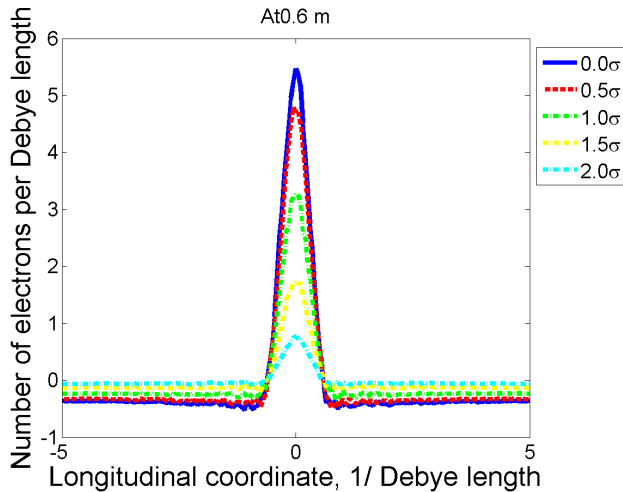


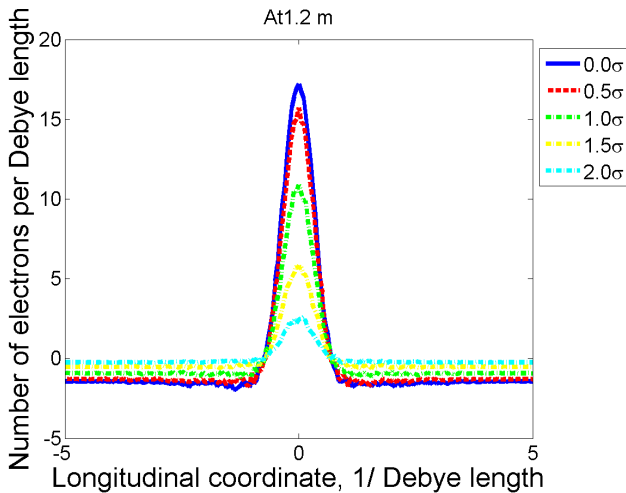




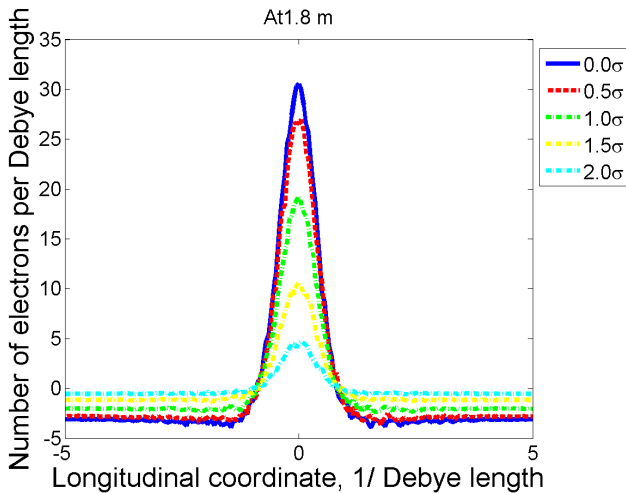


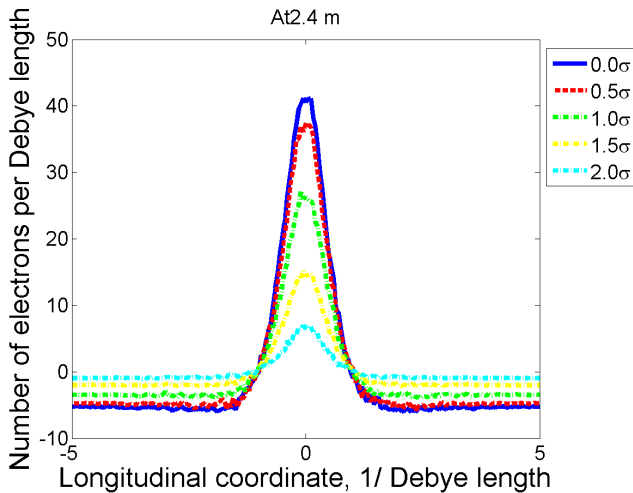


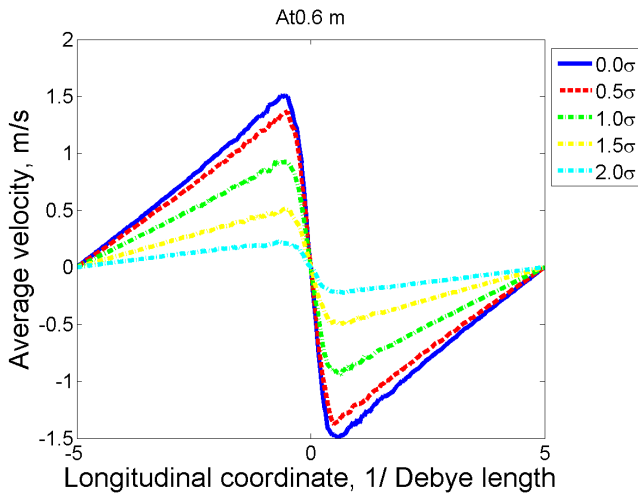


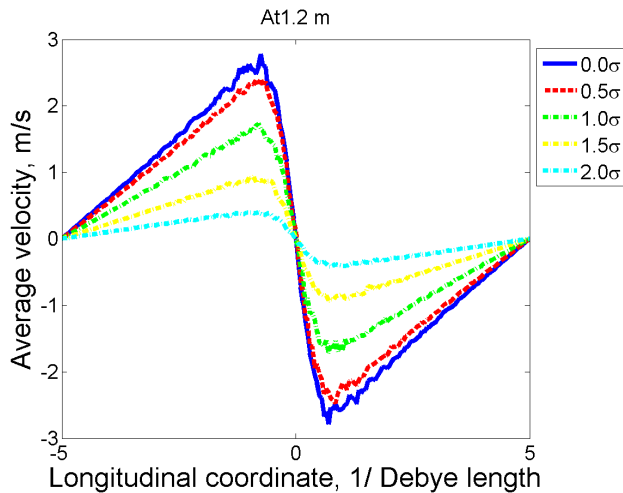


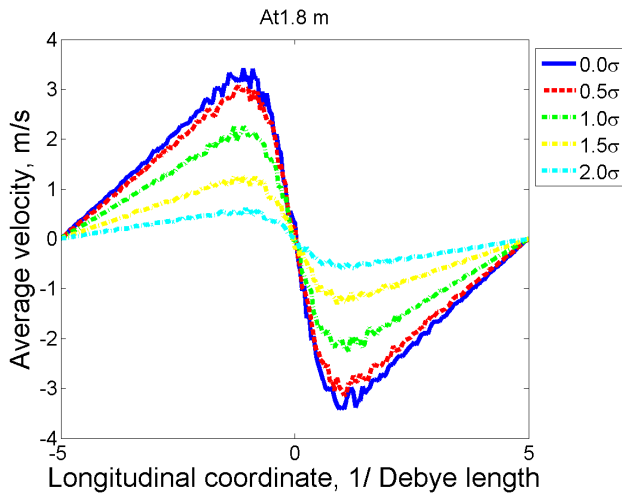


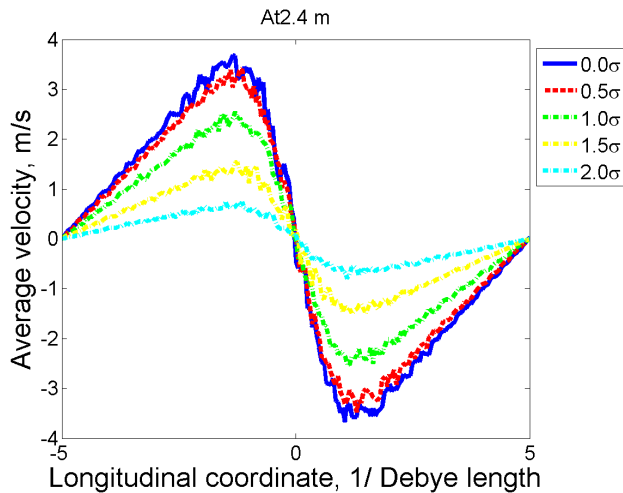




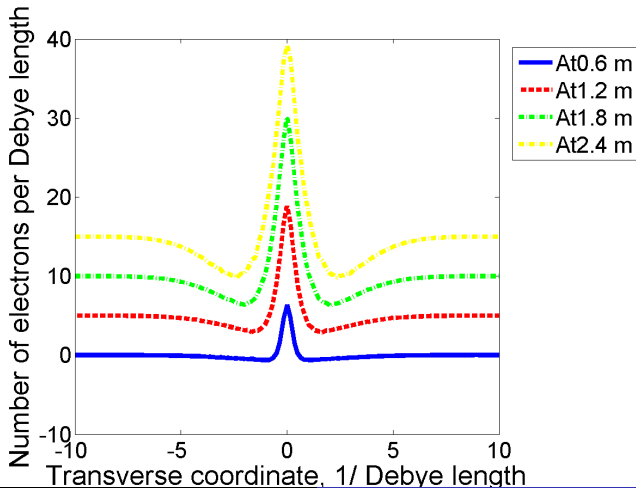




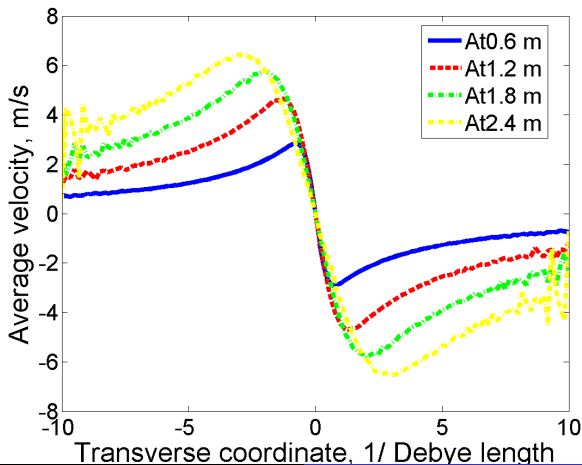




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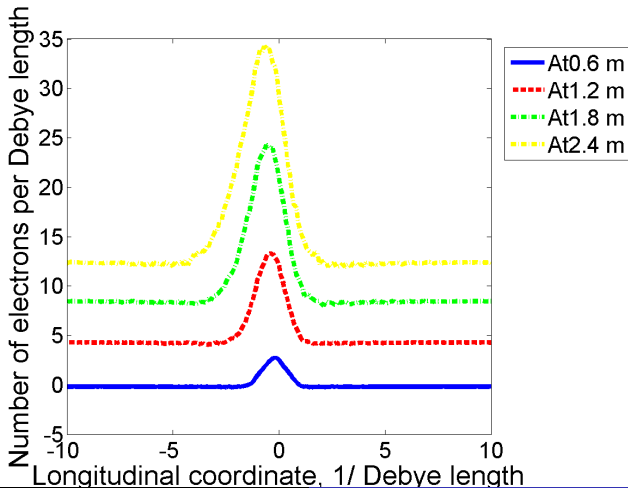


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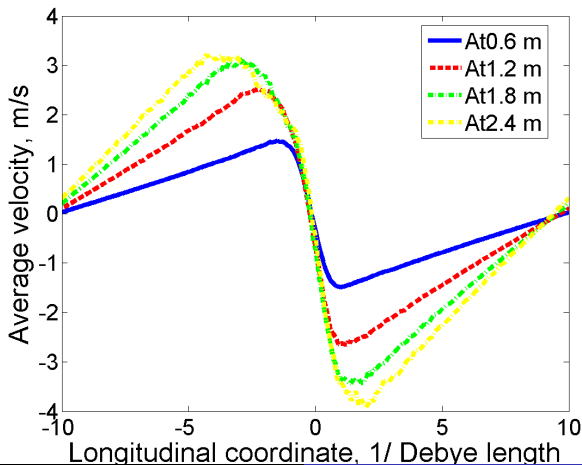




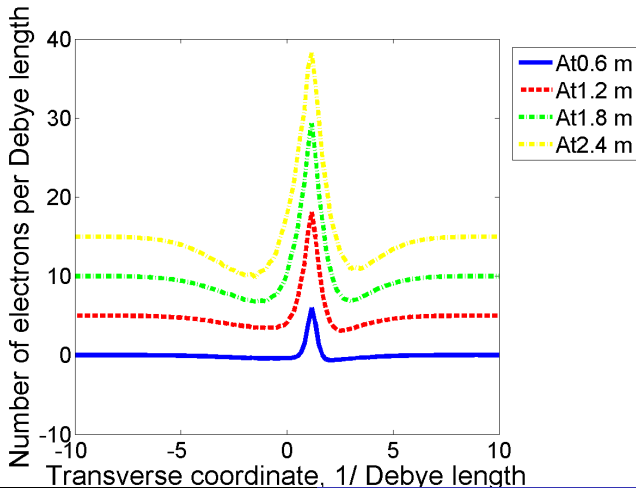
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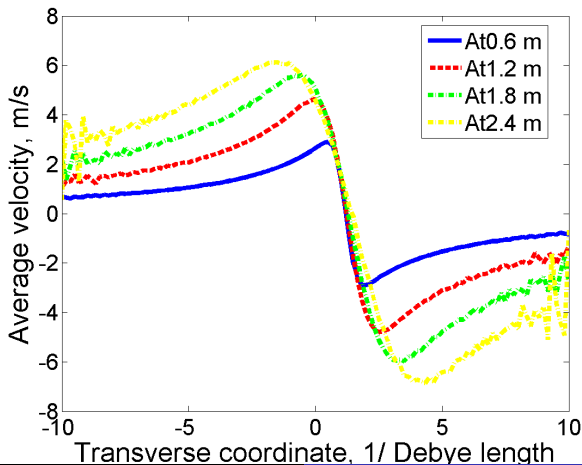
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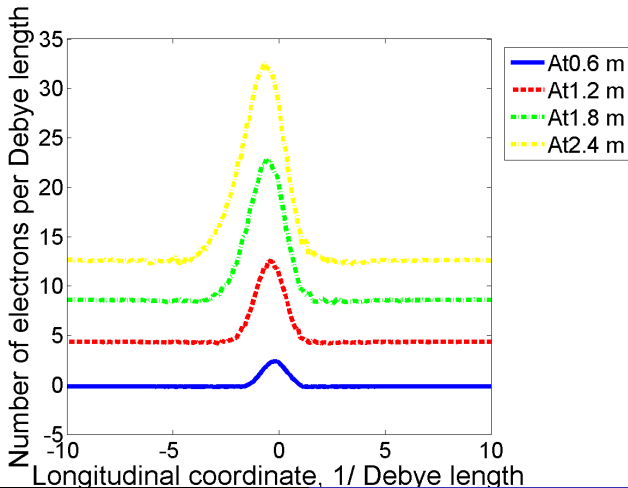
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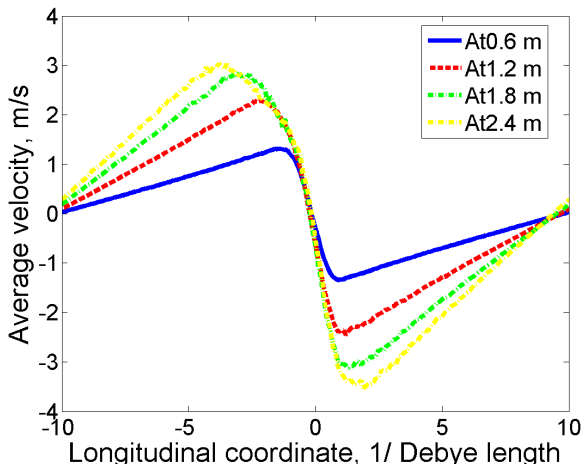
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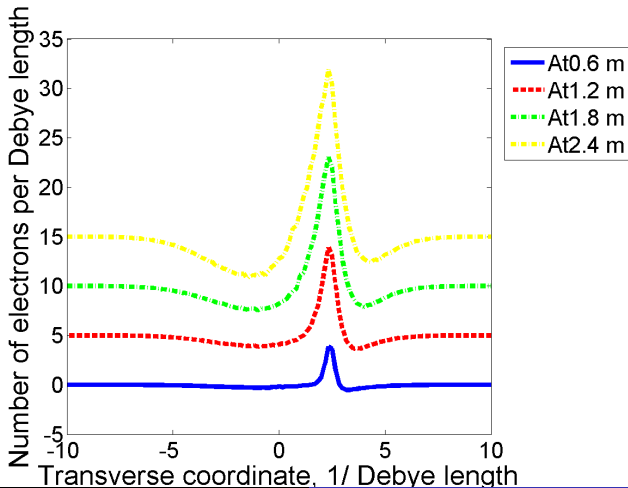
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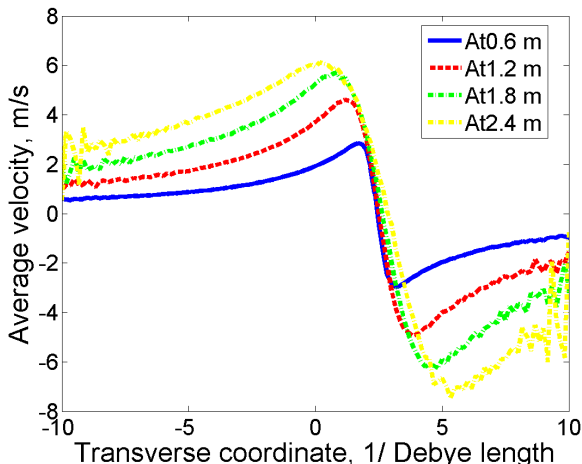
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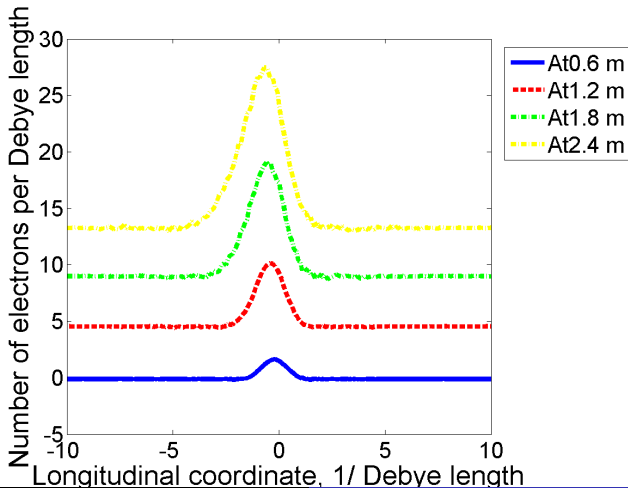


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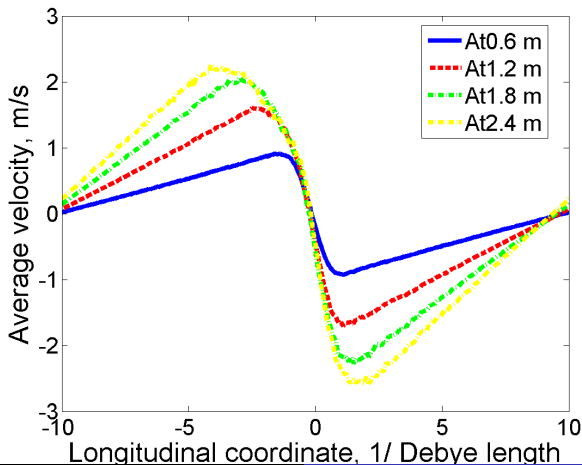




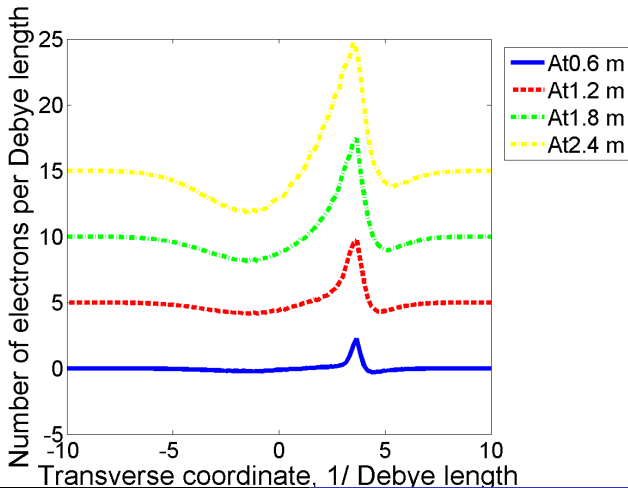
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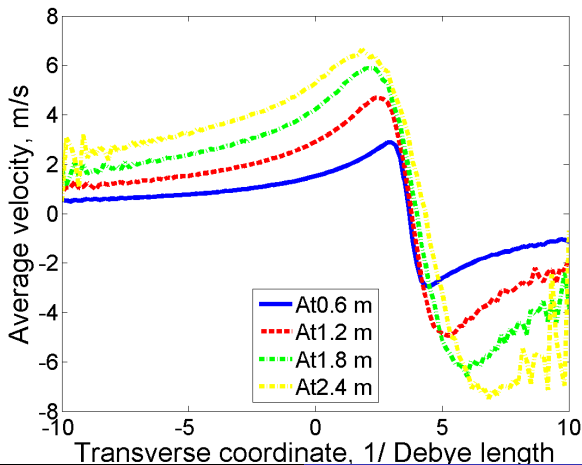
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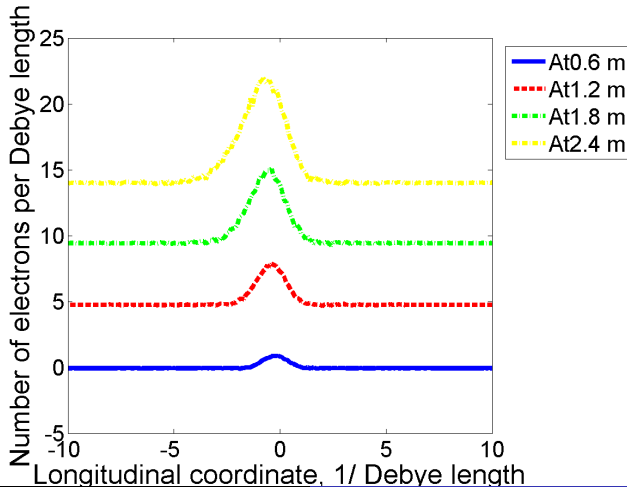
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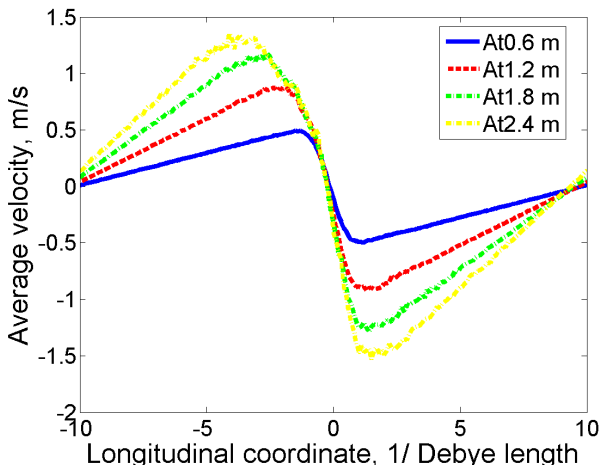
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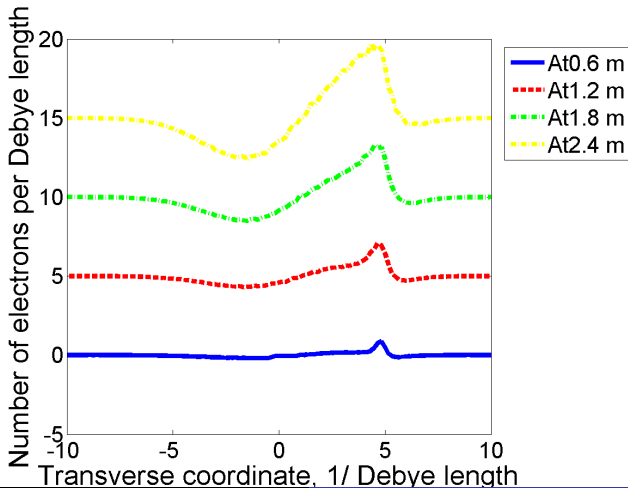
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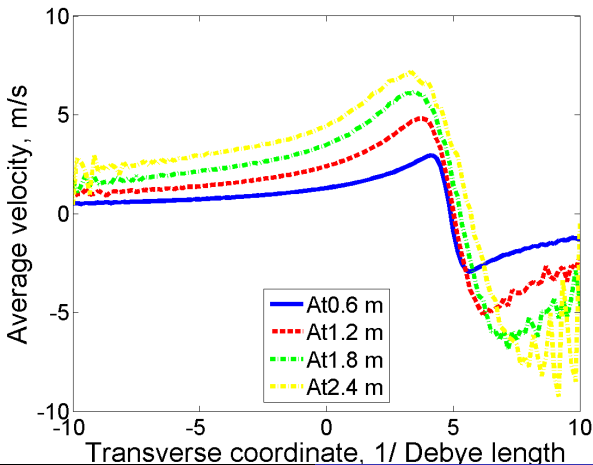
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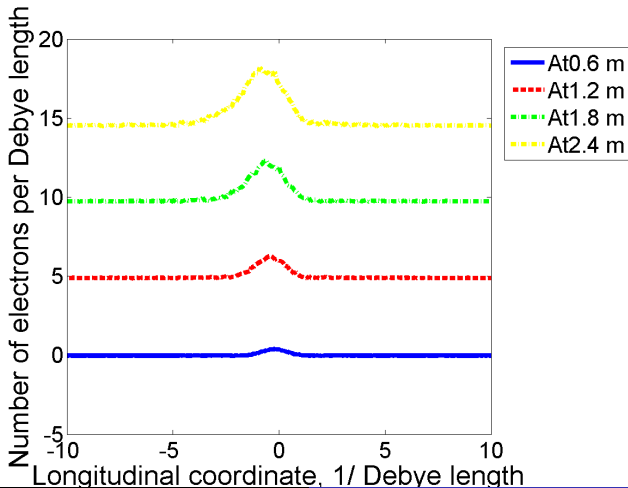


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