**EE535: Control of Electrical Drive Systems**

**Assignment 1: DC Motor Drive**

**M. Shamaas**

**2018-MS-EE-4**

**DC Motor Model**

1. **Per unit Current and per unit Speed**

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1. **Steady State per unit Current and per unit Speed**

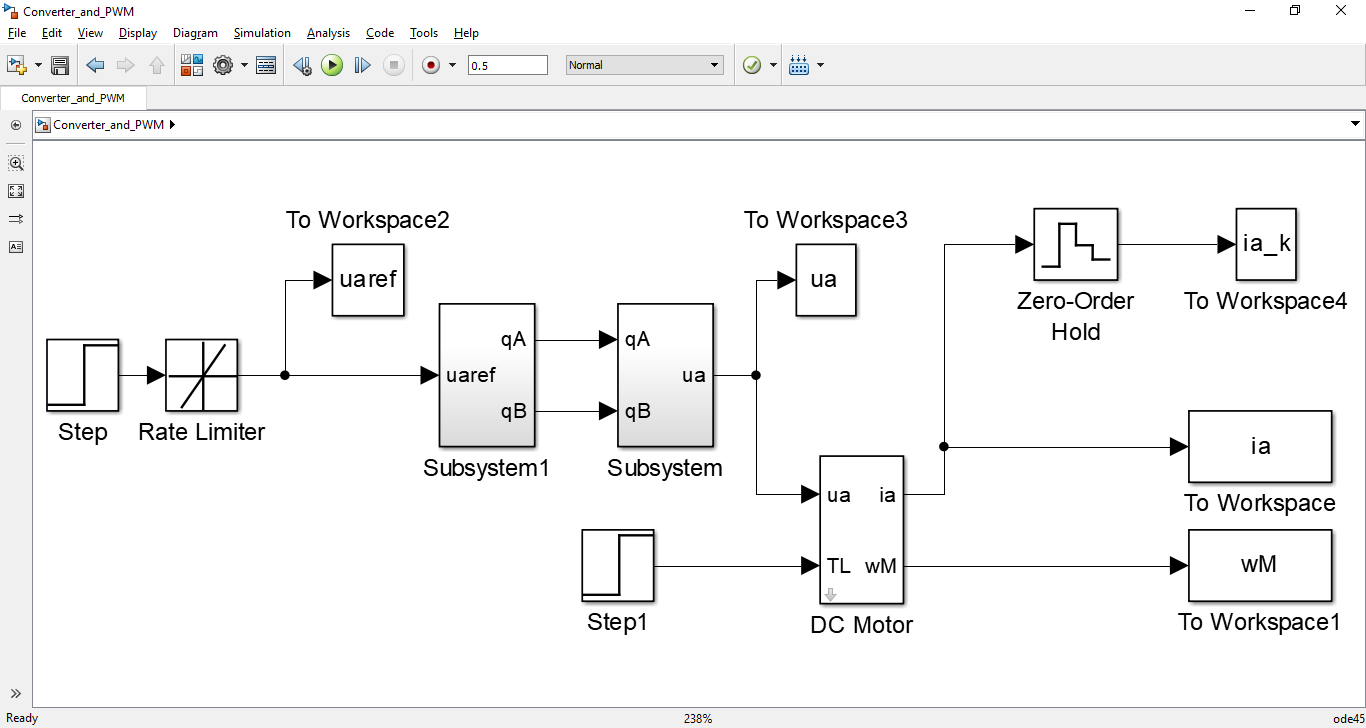
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1. **Limiting Rising Rate of Voltage**

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**DC-DC Converter and Unipolar PWM**

1. **Testing the Model**



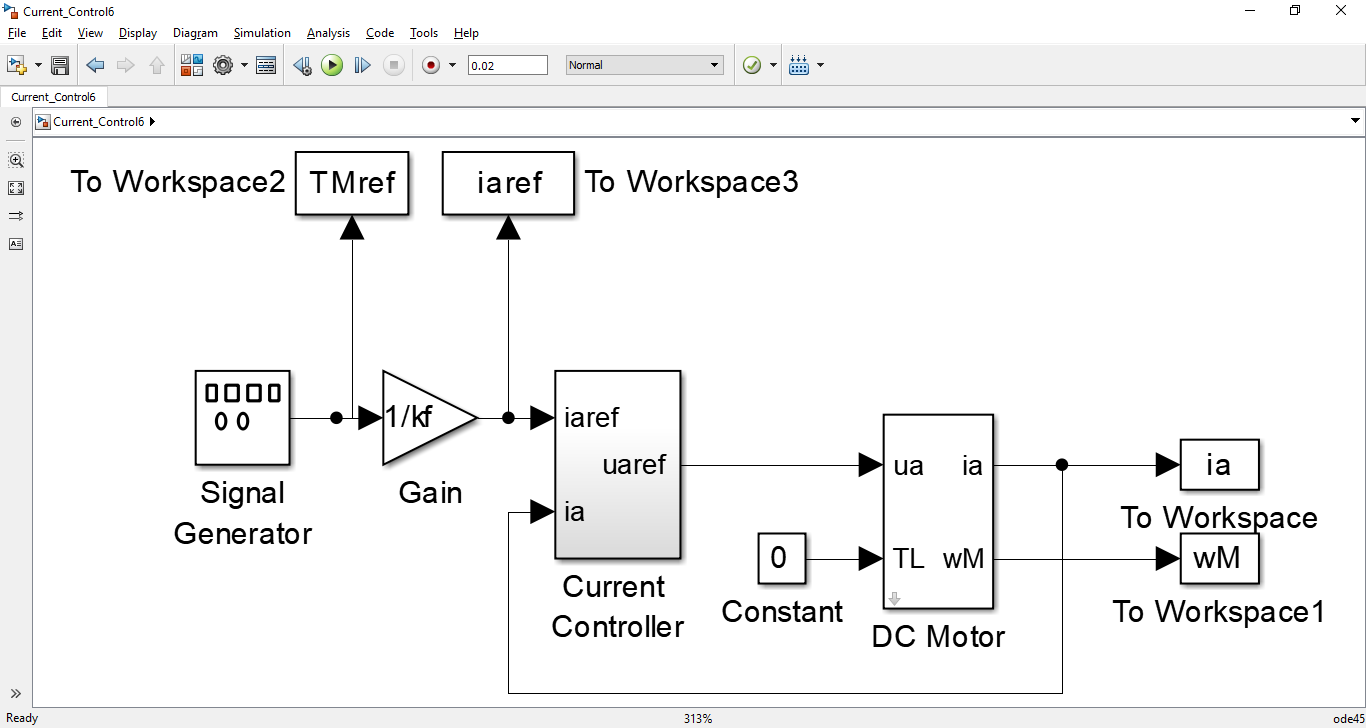
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1. **Plotting Armature Voltage and Current**

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**Cascaded Control**

1. **Current Control**



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**Speed Control**

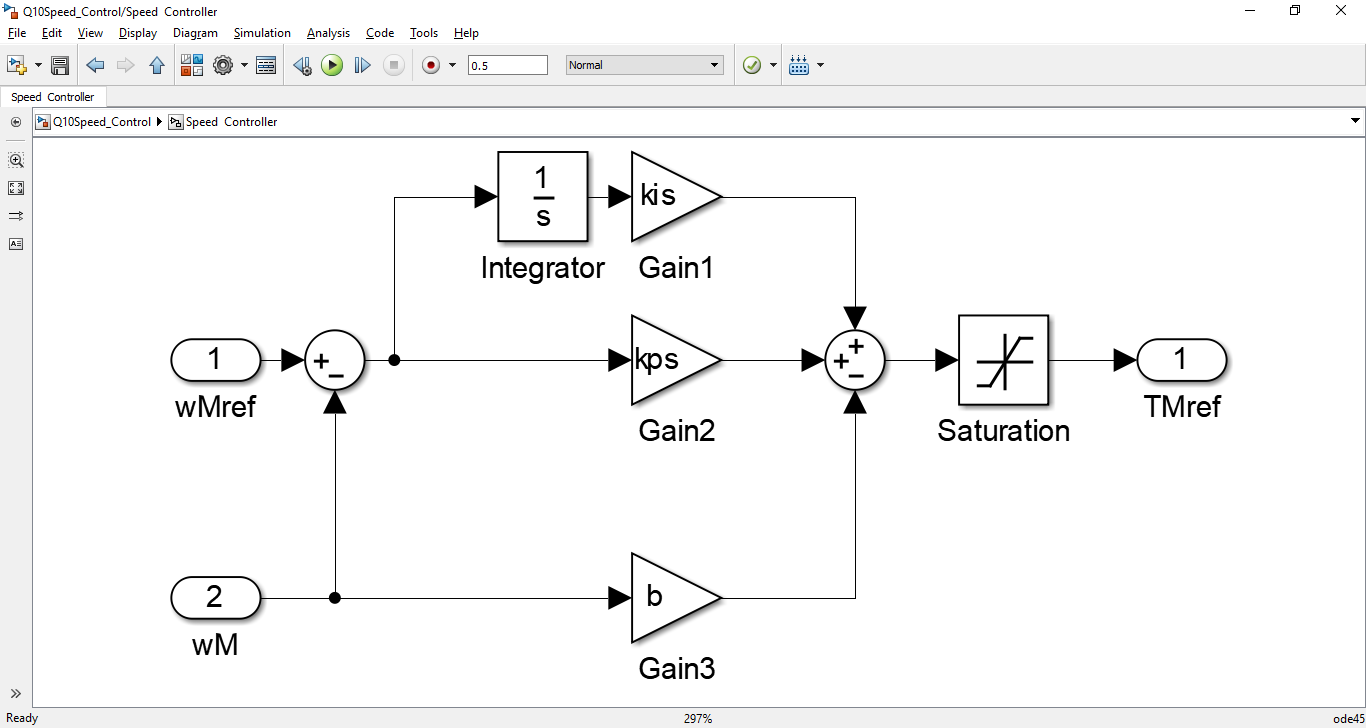
1. **Transfer Function**
2. **Testing the Model**

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1. **Tolerances**

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1. **Removing Anti-windup from Speed Controller**



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