Supercomputing Challenge Judging Criteria (Expo-Poster Session)

Evaluation Criterion	How to Score (0 to 10 points)
Problem Statement (Weight 15%) ❑ Was a scientific or mathematical problem clearly defined? ❑ Was the problem clearly thought out and well researched? ❑ Was appropriate background information presented to understand the context of the problem? ❑ Is the proposed solution clever and well thought out? ❑ Is it a complex problem or could it be solved on a calculator or with off-the-shelf applications? ❑ Was the problem appropriately simplified?	0 – problem not defined 1 – vaguely defined problem 3 – problem not clearly defined AND background information lacking 5 -- problem not clearly defined OR background information lacking 8 – problem clearly defined AND background information is appropriate and complete 10 – complex problem clearly defined with appropriate and complete background information
Computational, Mathematical and/or Agent-Based Model (Weight 25%) ❑ Is the mathematical model accurate (or a reasonable approximation)? ❑ Is an algorithmic model reasonable (agent-based problem and/or mathematically intractable problem)? ❑ Is the model correctly applied to the problem and its solution? ❑ Does the team understand the model, its equations, and variables? ❑ Is the computational model appropriate for the project? Are the assumptions/limitations of the model documented? Does the model require multiple iterations or samples to identify an optimum solution or range of solutions? ❑ Is the agent-based model a reasonable representation of the problem? Does the model correspond to a well-known mathematical model? If so, was the mathematical model used to validate the agent-based model? Does the model provide insight into the problem? Can anything be learned from the model? Does the team understand the agent's states and behaviors, and the role of the environment? In particular, does the team understand how the agents affect each other and/or modify their environment?	0 – no model 1 – basic model, but team doesn't understand it 3 – basic model, team understands it, but cannot answer questions about it 5 – basic understanding of model, but unable to answer questions about it 8 – basic understanding of model; some understanding of equations, variables, etc. 10 – complex model thoroughly understood
Code (Weight 25%) ❑ Was code shown? ❑ Was a real-time demo shown? ❑ Is the code commented? ❑ What variables are they using? Are they able to explain why they are using these variables?	0 – none 1 – code does not execute 3 – code is incomplete OR is a simple calculation that does not require a computer 5 – code is not original OR is undocumented 8 – code is original AND well documented 10 – original, documented code with real-time demo
Results & Conclusions (Weight 15%) ❑ Are the results reasonable and verifiable? ❑ Were logical conclusions drawn from the results? ❑ Do the conclusions relate to the stated problem?	0 – no results or conclusions 5 – results, but conclusions are incomplete or illogical 10 – reasonable results with logical conclusions that relate to the stated problem
Display and Presentation (Weight 10%) ❑ Was the display logical and well organized? ❑ Were the presenters knowledgeable? ❑ Were questions handled gracefully?	0 – none 3 – display does not support the project, is incomplete, or is not visually pleasing 5 – a good display with some problems 10 – a professional quality display
Integrity (Weight 10%) ❑ Was the work original (i.e., not plagiarized)? ❑ Were references cited and proper attribution given? ❑ Were graphics, figures, and equations cited and proper attribution given?	0 – evidence of plagiarism 5 – no plagiarism, but attribution not complete 10 – no plagiarism, complete and accurate attribution, complete and proper citing of references

Supercomputing Challenge Project Evaluation (Expo-Poster Session)

Team #: _____ **Judge:** _____

Comments	Score (0 to 10)
Problem Statement (Weight 15%)	
Computational, Mathematical and/or Agent-Based Model (Weight 40%)	
Code (Weight 10%)	
Results & Conclusions (Weight 15%)	
Display & Presentation (Weight 10%)	
Integrity (Weight 10%)	

Note: A copy of the completed form will be provided to each team.