Education through the prism of computation VITALIY KAUROV,
Wolfram Research — With the rapid development of technology, computation claims
its irrevocable place among research components of modern science. Thus to foster
a successful future scientist, engineer or educator we need to add computation to
the foundations of scientific education. We will discuss what type of paradigm
shifts it brings to these foundations on the example of Wolfram Science Summer
School [1]. It is one of the most advanced computational outreach programs run by
Wolfram Foundation, welcoming participants of almost all ages and backgrounds.
Centered on complexity science and physics, it also covers numerous adjacent and
interdisciplinary fields such as finance, biology, medicine and even music. We will
talk about educational and research experiences in this program during the 12 years
of its existence. We will review statistics and outputs the program has produced.
Among these are interactive electronic publications at the Wolfram Demonstrations
Project [2] and contributions to the computational knowledge engine Wolfram|Alpa
[3].

[1] http://www.wolframscience.com/summerschool
[2] http://demonstrations.wolfram.com
[3] http://www.wolframalpha.com

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