

To: Attendees and prizewinners at the 2011 Lattice International Conference.

From: Ken Wilson.

I am honored and delighted that you have established the Ken Wilson Lattice Award.

I remain concerned that Quantum Chromodynamics may differ in fundamental ways from what is now widely accepted, especially if the changes needed show up only in small but now measurable corrections, just as the famous precession of the perihelion of Mercury was and remains a small correction to Newton's theory of planetary motions.

I consider that numerical methods have a comparable role with analytic thinking, experiment, and observation in physics, a role that amazing continuing advances in computing power, and similar advances in algorithm development, have made possible. Over the next century, I am confident that there will be surprising breakthroughs achieved by numerical studies, perhaps even on questions as basic as: Why does the universe exist? I urge that the broadest possible range of research strategies are pursued, including even possible but now unexpected numerical methods for coping with questions about the early universe.

Finally, numerical studies on the world's most powerful computers are linked in with broader development in the human society to come, with the worldwide Internet and associated computing power making possible a very different future world than most people of today expect. Attendees at your meeting, especially students at an early stage of their career, can expect major future surprises in society itself, surprises made possible by ongoing developments in today's rapidly changing society. Of especial note is that more and more individuals are entering multiple careers over their full lifetime, not just the one they set out in as graduate students.