**Motivation**
Transposing both analyzability and self-organized phenomena from physics (instead of living systems) to computer networking.

**Approach**
Online simulation of physical forces in a distributed physical virtual machine.

**From Forces to Networking Services**

<table>
<thead>
<tr>
<th>Attractive forces</th>
<th>Routing</th>
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</thead>
<tbody>
<tr>
<td>(Gravity, Electrostatics)</td>
<td>Content-centric network</td>
</tr>
</tbody>
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<table>
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<th>Repulsive forces</th>
<th>Load balancing</th>
</tr>
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<tbody>
<tr>
<td>(Electrostatics)</td>
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</tbody>
</table>

**Metaphor**
- Particle: Packet
- (Sub) space: Network node
- Force: Execution rule
- Time: Scheduled transmission event

**Current Implementation**
Event system with stochastic transmission. Scheduling adheres to Coulomb forces.

**Routing and Load Balancing**
A cloud of protons announcing the destination creates a pit. Search electrons (packets) follow the gradient.

**Future**
- Integration of energy, entropy and mass
- Extension to other types of forces
- Study of the behaviour of particles subject to competitive forces
- Design of a generic programming language for artificial physics

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