**MICHAEL SIGAL**, University of Toronto, Toronto, ON, M5S 2E4 *Mathematical Questions Arising from Bose–Einstein Condensation* 

Bose–Einstein condensation was predicted by Einstein in 1925 and was experimentally discovered 70 years later. This discovery was followed by a flurry of activity in the physics community with many new experiments and with attempts to construct a theory of the newly discovered state of matter. In this talk I will review some recent rigorous results in the subject and outline open problems.