

1163-60-1559 **Padmanabhan Sundar*** (psundar@lsu.edu), Department of Mathematics, Lockett Hall,
Louisiana State University, Baton Rouge, LA 70803. *The Boltzmann Process*. Preliminary report.

A stochastic differential equation (SDE) is constructed that corresponds to a suitably linearized Boltzmann equation. Under certain regularity conditions, its solvability is established. The law of the solution of the SDE is shown to coincide with the solution of the Boltzmann equation whenever the latter is unique. This is a joint work with Albeverio and Ruediger. (Received September 15, 2020)