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**Solutions stationnaires des équations de Vlasov-Poisson. (Stationary solutions of Vlasov-Poisson equations).** (French) [Zbl 0711.35139](#)

C. R. Acad. Sci., Paris, Sér. I 311, No. 6, 307-312 (1990).

Summary: We establish existence of solutions for the stationary Vlasov-Poisson boundary value problem. These solutions are obtained as limits of solutions of Vlasov-Boltzmann-Poisson equations. The proof is based on a bound for the particles concentration which is obtained thanks upper solutions when the forces are repulsive.

**MSC:**

- [35Q99](#) Partial differential equations of mathematical physics and other areas of application
- [82B21](#) Continuum models (systems of particles, etc.) arising in equilibrium statistical mechanics
- [35A35](#) Theoretical approximation in context of PDEs
- [85A40](#) Cosmology

**Keywords:**

repulsive forces; existence; the stationary Vlasov-Poisson boundary value problem

**Full Text:** [EuDML](#)