

**Kubyshkin, V. A.; Finyagina, V. I.**

**Control of moving heat sources.** (English. Russian original) [Zbl 0705.93042](#)

*Autom. Remote Control* 50, No. 11, 1488-1496 (1989); translation from *Avtom. Telemekh.* 1989, No. 11, 36-47 (1989).

Summary: The designing of moving controls is considered for a heat source that moves along a path which lies in a bounded region of the plane. The state of the object is described by a two-dimensional heat equation. The problem is solved by substitution and by realizing a distributed control by a moving control. Examples concerning moving controls in the plane are presented.

**MSC:**

[93C10](#) Nonlinear systems in control theory

[93C20](#) Control/observation systems governed by partial differential equations

[80A20](#) Heat and mass transfer, heat flow (MSC2010)

**Keywords:**

[moving controls](#); [two-dimensional heat equation](#)