

**Classificare**  
**le seguenti equazioni differenziali**

$$u_t = 3u_{xx} + 2u_2 \quad \text{in } R \times [0, T[$$

$$u_t = 3u_{xx} + u_{xy} + 2u_{yy} \quad \text{in } R^2 \times [0, T[$$

$$5u_{xx} + 2u_{xy} - 6u_{yy} - 3u_y = 0 \quad \text{in } R^2$$

$$5u_{xx} + 2u_{xy} + (6 + x^2)u_{yy} - 3u_y = 0 \quad \text{in } R^2$$

$$u_t = 5u_{xx} + 2u_{xy} + u_{yy} \quad \text{in } R^2 \times [0, T[$$

$$3u_{xx} - u_{xy} + 7u_{yy} + u_x + u_y = 0 \quad \text{in } R^2$$

$$3u_{xx} - 2u_{xy} + 5u_{yy} + (x^2 + y^2 + 1)u_{zz} + u_x + u_y = 0 \quad \text{in } R^3$$

$$3(y^2 + y + 1)u_{xx} - u_{xy} + (x^2 + 6)u_{yy} + u_{zz} + 7u_x + u_y = 0 \quad \text{in } R^3$$

$$5u_{xx} - u_{xy} - 7u_{yy} - u_{zz} + u_x + 3u_y = 0 \quad \text{in } R^3$$