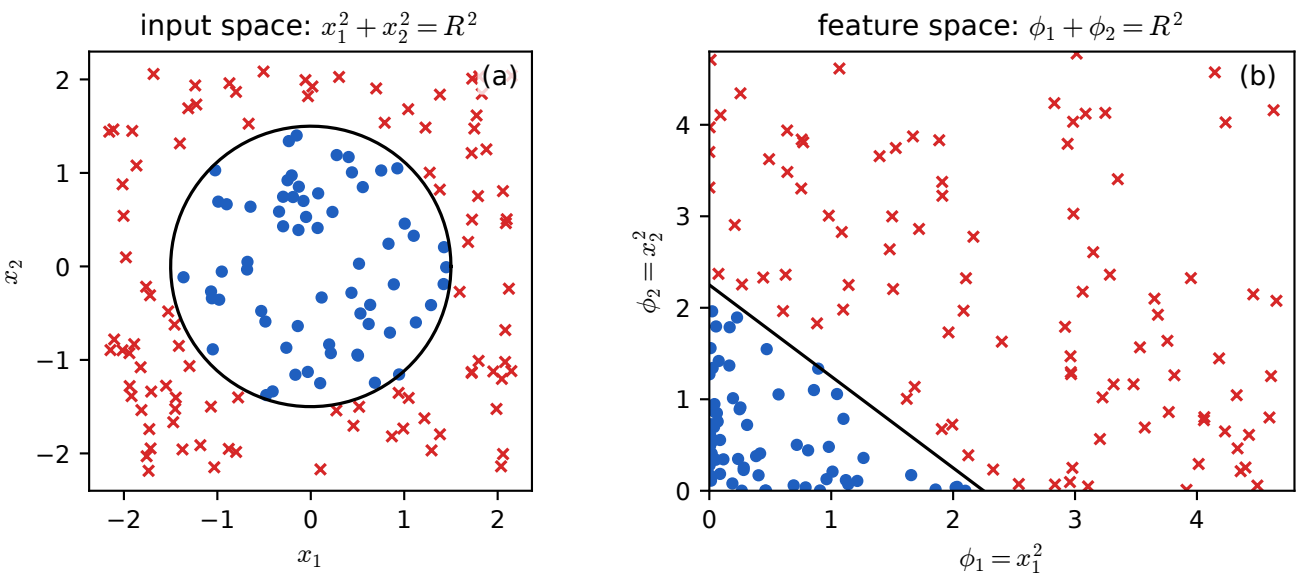

input space: $x_1^2 + x_2^2 = R^2$
(a)
x_1
x_2
feature space: $\phi_1 + \phi_2 = R^2$
(b)
$\phi_1 = x_1^2$
$\phi_2 = x_2^2$