

## Graphs with Many $\pm 1$ or $\pm\sqrt{2}$ Eigenvalues

**Ebrahim Ghorbani**

*Sharif University of Technology  
Iran*

Using the notion of pseudo  $(v, k, \lambda)$ -designs, all graphs of order  $n$  whose adjacency spectrum contains  $\pm 1$  or  $\pm\sqrt{2}$  with multiplicity  $(n-2)/2$  or  $(n-3)/2$  are characterized.