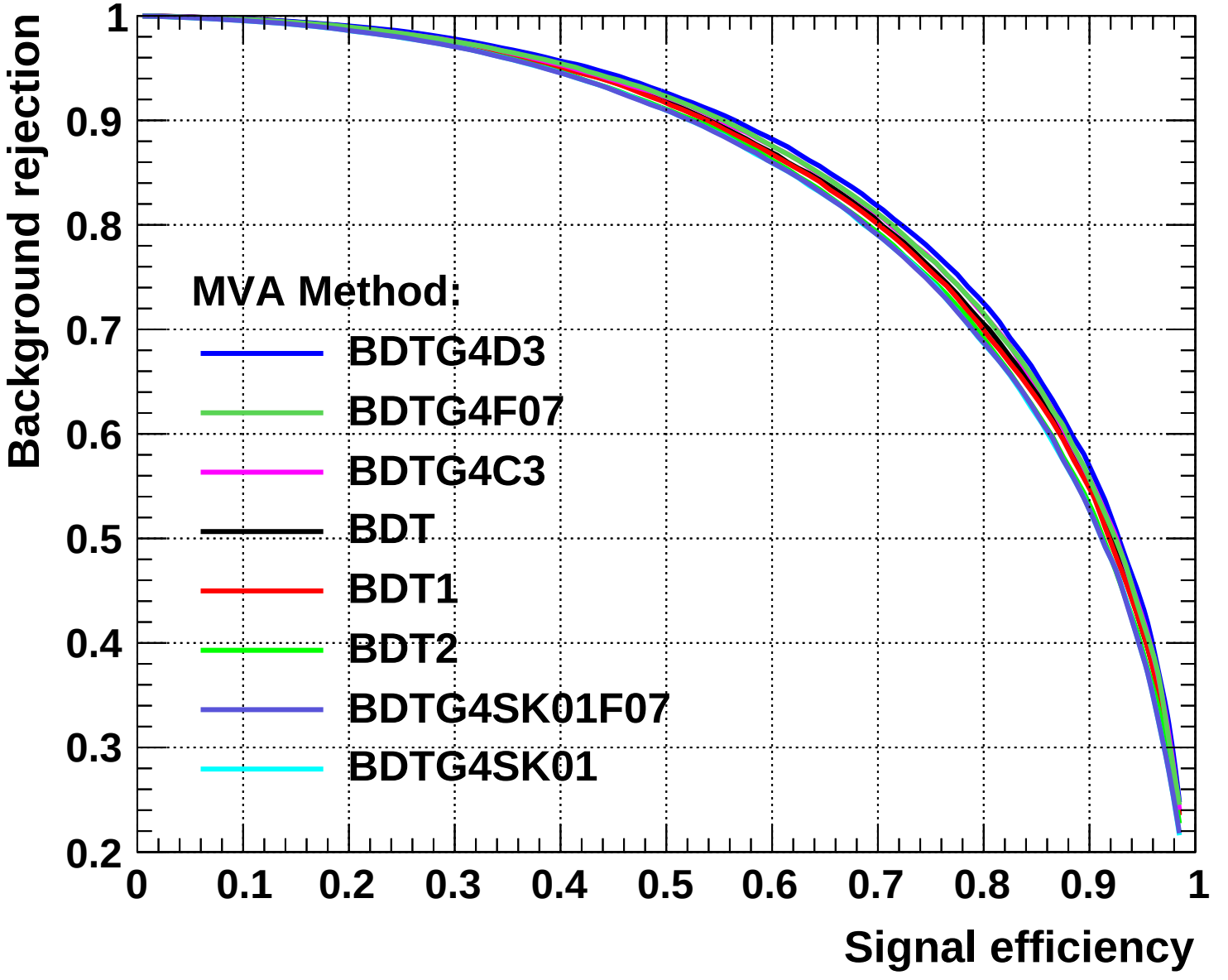Background rejection versus Signal efficiency