Abstract

The puncturing and shortening techniques are two important approaches to constructing new linear codes from old ones. In the past 70 years, a lot of progress on the puncturing technique has been made, and many works on punctured linear codes have been done. However, till now little research on the shortening technique has been done and there are only a handful references on shortened linear codes. The objective of this talk is to discuss some shortened codes from binary cyclic codes with three zeros and determine their parameters. Some of these shortened codes are optimal or almost optimal.