CLAIMS

1. A method of wireless communication at a transmitting wireless communication device, comprising: encoding an information block to produce a code block comprising a plurality of coded bits; interleaving the plurality of coded bits utilizing an interleaver to produce an interleaved code block, wherein the interleaver comprises a plurality of rows and a plurality of columns, wherein a number of the plurality of columns varies between the plurality of rows; and transmitting the interleaved code block to a receiving wireless communication device over a wireless air interface; wherein a number of rows in a first column of the plurality of columns and a number of columns in a first row of the plurality of rows are equal and selected based on a number of the plurality of coded bits in the code block; wherein the number of rows in the first column comprises a smallest integer P that satisfies an equation $P*(P+1)/2 \geq N$, where N comprises a number of the plurality of coded bits in the code block.

2. The method of claim 1, wherein interleaving the plurality of coded bits further comprises: feeding the plurality of coded bits into successive rows of the plurality of rows of the interleaver starting with a first row of the plurality of rows; and reading out the plurality of coded bits from successive columns of the plurality of columns of the interleaver starting with a first column of the plurality of columns; wherein a first one of the coded bits in the first row is a first one of the coded bits in the first column.

3. The method of claim 2, wherein a number of the plurality of coded bits between adjacent ones of the plurality of coded bits within adjacent ones of the plurality of rows varies between the plurality of rows.

4. The method of claim 2, wherein the interleaver comprises a right isosceles triangle-shaped matrix of the plurality of rows and the plurality of columns.

5. The method of claim 2, wherein interleaving the plurality of coded bits further comprises: inserting one or more null values into remaining ones of the plurality of rows after the plurality of coded bits are fed into the interleaver; and skipping the one or more null values when reading out the plurality of coded bits.

6. The method of claim 5, wherein the interleaver comprises a trapezoid-shaped matrix of the plurality of rows and the plurality of columns excluding the remaining ones of the plurality of rows containing the one or more null values.

7. The method of claim 1, wherein interleaving the plurality of coded bits further comprises: inserting one or more null values into successive rows of the plurality of rows of the interleaver starting with a first row of the plurality of rows, wherein a number of the one or more null values is equal to a number of elements in a matrix comprising the plurality of rows and the plurality of columns less a number of the plurality of coded bits; feeding the plurality of coded bits into remaining ones of the plurality of rows after the one or more null values are inserted into the interleaver; reading out the plurality of coded bits from successive columns of the plurality of columns of the interleaver starting with a first column of the plurality of columns; and skipping the one or more null values when reading out the plurality of coded bits.

8. The method of claim 1, wherein encoding the information block further comprises: polar coding the information block, wherein the code block comprises a polar code block.

9. An apparatus configured for wireless communication, the apparatus comprising: a processor; a transceiver communicatively coupled to the processor; and a memory communicatively coupled to the processor, wherein the processor is configured to: encode an information block to produce a code block comprising a plurality of coded bits; interleave the plurality of coded bits utilizing an interleaver to produce an interleaved code block, wherein the interleaver comprises a plurality of rows and a plurality of columns, wherein a number of the plurality of columns varies between the plurality of rows; and transmit the interleaved code block to a receiving wireless communication device over a wireless air interface via the transceiver; wherein a number of rows in a first column of the plurality of columns and a number of columns in a first row of the plurality of rows are equal and selected based on a number of the plurality of coded bits in the code block; wherein the number of rows in the first column comprises a smallest integer P that satisfies an equation $P*(P+1)/2 \geq N$, where N comprises a number of the plurality of coded bits in the code block.

10. The apparatus of claim 9, wherein the processor is further configured to: feed the plurality of coded bits into successive rows of the plurality of rows of the interleaver starting with a first row of the plurality of rows; and read out the plurality of coded bits from successive columns of the plurality of columns of the interleaver starting with a first column of the plurality of columns; wherein a first one of the coded bits in the first row is a first one of the coded bits in the first column.

11. The apparatus of claim 10, wherein a number of the plurality of coded bits between adjacent ones of the plurality of coded bits within adjacent ones of the plurality of rows varies between the plurality of rows.

12. The apparatus of claim 10, wherein the interleaver comprises a right isosceles triangle-shaped matrix of the plurality of rows and the plurality of columns.

13. The apparatus of claim 10, wherein the processor is further configured to: insert one or more null values into remaining ones of the plurality of rows after the plurality of coded bits are fed into the interleaver; and skip the one or more null values when reading out the plurality of coded bits.

14. The apparatus of claim 9, wherein the processor is further configured to: polar code the information block, wherein the code block comprises a polar code block.

15. An apparatus configured for wireless communication, the apparatus comprising: means for encoding an information block to produce a code block comprising a plurality of coded bits; means for interleaving the plurality of coded bits to produce an interleaved code block, wherein the means for interleaving comprises a plurality of rows and a plurality of columns, wherein a number of the plurality of columns varies between the plurality of rows; and means for transmitting the interleaved code block to a receiving wireless communication device over a wireless air interface; wherein a number of rows in a first column of the plurality of columns and a number of columns in a first row of the plurality of rows are equal and selected based on a number of the plurality of coded bits in the code block; wherein the number of rows in the first column comprises a smallest integer P that satisfies an equation $P*(P+1)/2 \geq N$, where N comprises a number of the plurality of coded bits in the code block.

16. The apparatus of claim 15, wherein the means for interleaving the plurality of coded bits further comprises: means for feeding the plurality of coded bits into successive rows of the plurality of rows starting with a first row of the plurality of rows; and means for reading out the plurality of coded bits from successive columns of the plurality of columns starting with a first column of the plurality of columns; wherein a first one of the coded bits in the first row is a first one of the coded bits in the first column.

17. The apparatus of claim 16, wherein a number of the plurality of coded bits between adjacent ones of the plurality of coded bits within adjacent ones of the plurality of rows varies between the plurality of rows.

18. The apparatus of claim 16, wherein the means for interleaving the plurality of coded bits further comprises: means for inserting one or more null values into remaining ones of the plurality of rows after the plurality of coded bits; and means for skipping the one or more null values when reading out the plurality of coded bits.

19. The apparatus of claim 15, wherein the means for encoding the information block further comprises: means for polar coding the information block, wherein the code block comprises a polar code block.

20. A non-transitory computer-readable medium storing computer executable code, comprising code that when executed by a processor at a transmitting wireless communication device causes the transmitting wireless communication device to: encode an information block to produce a code block comprising a plurality of coded bits; interleave the plurality of coded bits utilizing an interleaver to produce an interleaved code block, wherein the interleaver comprises a plurality of rows and a plurality of columns, wherein a number of the plurality of columns varies between the plurality of rows; and transmit the interleaved code block to a receiving wireless communication device over a wireless air interface; wherein a number of rows in a first column of the plurality of columns and a number of columns in a first row of the plurality of rows are equal and selected based on a number of the plurality of coded bits in the code block; wherein the number of rows in the first column comprises a smallest integer P that satisfies an equation $P*(P+1)/2 \geq N$, where N comprises a number of the

plurality of coded bits in the code block.

21. The non-transitory computer-readable medium of claim 20, further comprising code for causing the transmitting wireless communication device to: feed the plurality of coded bits into successive rows of the plurality of rows of the interleaver starting with a first row of the plurality of rows; and read out the plurality of coded bits from successive columns of the plurality of columns of the interleaver starting with a first column of the plurality of columns; wherein a first one of the coded bits in the first row is a first one of the coded bits in the first column.

22. The non-transitory computer-readable medium of claim 21, wherein a number of the plurality of coded bits between adjacent ones of the plurality of coded bits within adjacent ones of the plurality of rows varies between the plurality of rows.