CLAIMS

1. A method for wireless communication, comprising:

receiving, from a base station, a first channel state information reference signal (CSI-RS) over a first resource subset of a CSI-RS resource associated with a first non-consecutive partial band, wherein the first CSI-RS is precoded according to a first partial band configuration;

receiving a second CSI-RS over a second resource subset of the CSI-RS resource associated with a second non-consecutive partial band, wherein the second CSI-RS is precoded according to a second partial band configuration;

receiving, from the base station, multiple CSI-RS resources from a CSI-RS resource set, wherein each CSI-RS resource is partitioned according to at least the first non-consecutive partial band and the second non-consecutive partial band;

determining, based at least in part on the first and second CSI-RSs, one or more channel state parameters based at least in part on the first non-consecutive partial band and the second non-consecutive partial band; and

transmitting, to the base station, a feedback message that indicates the one or more channel state parameters.

2. The method of claim 1, wherein determining the one or more channel state parameters comprises:

determining one or more channel state parameters for the CSI-RS resource corresponding to the first and second non-consecutive partial bands based at least in part on a channel estimation of the first and second non-consecutive partial bands.

3. The method of claim 1, further comprising:

receiving, from the base station, an indication of one or both of the first partial band configuration or the second partial band configuration, wherein the indication is received via a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or downlink control information (DCI).

4. The method of claim 1, wherein:

the first partial band configuration indicates at least one of the first resource

subset, a first cycling granularity for the first non-consecutive partial band, a first time interval for the first CSI-RS, a first number of ports associated with transmission of the first CSI-RS, or a combination thereof; and

the second partial band configuration indicates at least one of the second resource subset, a second cycling granularity for the second non-consecutive partial band, a second time interval for the second CSI-RS, a second number of ports associated with transmission of the second CSI-RS, or a combination thereof.

5. The method of claim 4, wherein:

the first cycling granularity indicates a number of consecutive resource blocks (RBs) in a frequency domain, time domain, or a combination thereof of the first resource subset; and

the second cycling granularity indicates a number of consecutive resource blocks (RBs) in a frequency domain, a time domain, or a combination thereof of the second resource subset.

6. The method of claim 1, further comprising:

estimating a first effective channel for the first non-consecutive partial band based at least in part on a first set of RBs of the first resource subset; and

estimating a second effective channel for the second non-consecutive partial band based at least in part on a second set of RBs of the second resource subset, wherein the second non-consecutive partial band comprises a non-consecutive partial band from the first non-consecutive partial band that is non-contiguous in a frequency domain, time domain, or a combination thereof.

7. The method of claim 6, further comprising:

selecting a channel state information resource indicator (CRI) based at least in part on the first and second effective channels, wherein the one or more channel state parameters are determined based at least in part on the CRI, and wherein the one or more channel state parameters comprise at least one of a precoding matrix indicator, a precoding type indicator, a rank indicator, a channel quality indicator, or a combination thereof.

8. The method of claim 1, wherein:

one or both of a first and second CSI-RS port to data precoder mappings is based at least in part on a co-phase vector or Alamouti encoding associated with a set of resource elements (REs) corresponding to a respective resource subset of the first resource subset and the second resource subset.

9. The method of claim 1, further comprising:

receiving, from the base station, a control message indicating that the first partial band configuration and the second partial band configuration have different configuration parameters, wherein at least one configuration parameter of the first partial band configuration or the second partial band configuration is received in a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or in downlink control information (DCI).

10. The method of claim 1, wherein:

the CSI-RS resource comprises one CSI-RS resource of the CSI-RS resource set.

11. The method of claim 1, wherein:

at least two CSI-RS resources are different by at least a number of partial bands, a time duration for each partial band, a cycling granularity for each partial band, a number of CSI-RS ports for each partial band, precoder used for each partial band, or any combination thereof.

12. The method of claim 1, further comprising:

receiving, from the base station, a CSI-RS resource set configuration, wherein the CSI-RS resource set configuration comprises at least one of a number of CSI-RS resources of the CSI-RS resource set, a number of partial bands in each CSI-RS resource, a time duration for each partial band, a cycling granularity for each partial band, a number of CSI-RS ports for each partial band, or a combination thereof, and wherein the CSI-RS resource set configuration is included in a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or in downlink control information (DCI).

13. An apparatus for wireless communication, comprising:

a processor;

memory coupled with the processor; and

instructions stored in the memory and configured, when executed by the

processor, to cause the apparatus to:

receive, from a base station, a first channel state information reference signal (CSI-RS) over a first resource subset of a CSI-RS resource associated with a first non-consecutive partial band, wherein the first CSI-RS is precoded according to a first partial band configuration;

receive a second CSI-RS over a second resource subset of the CSI-RS resource associated with a second non-consecutive partial band, wherein the second CSI-RS is precoded according to a second partial band configuration;

receive, from the base station, multiple CSI-RS resources from a CSI-RS resource set, wherein each CSI-RS resource is partitioned according to at least the first non-consecutive partial band and the second non-consecutive partial band;

determine, based at least in part on the first and second CSI-RSs, one or more channel state parameters based at least in part on the first non-consecutive partial band and the second non-consecutive partial band; and

transmit, to the base station, a feedback message that indicates the one or more channel state parameters.

14. The apparatus of claim 13, wherein the instructions to determine the one or more channel state parameters are further executed by the processor to cause the apparatus to:

determine one or more channel state parameters for the CSI-RS resource corresponding to the first and second non-consecutive partial bands based at least in part on a channel estimation of the first and second non-consecutive partial bands.

15. The apparatus of claim 13, wherein the instructions are further executed by the processor to cause the apparatus to:

receive, from the base station, an indication of one or both of the first partial band configuration or the second partial band configuration, wherein the indication is received via a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or downlink control information (DCI).

16. The apparatus of claim 13, wherein:

the first partial band configuration indicates at least one of the first resource

subset, a first cycling granularity for the first non-consecutive partial band, a first time interval for the first CSI-RS, a first number of ports associated with transmission of the first CSI-RS, or a combination thereof; and

the second partial band configuration indicates at least one of the second resource subset, a second cycling granularity for the second non-consecutive partial band, a second time interval for the second CSI-RS, a second number of ports associated with transmission of the second CSI-RS, or a combination thereof.

17. The apparatus of claim 16, wherein:

the first cycling granularity indicates a number of consecutive resource blocks (RBs) in a frequency domain, time domain, or a combination thereof of the first resource subset; and

the second cycling granularity indicates a number of consecutive resource blocks (RBs) in a frequency domain, a time domain, or a combination thereof of the second resource subset.

18. The apparatus of claim 13, wherein one or both of a first and second CSI-RS port to data precoder mappings is based at least in part on a co-phase vector or Alamouti encoding associated with a set of resource elements (REs) corresponding to a respective resource subset of the first resource subset and the second resource subset.

19. The apparatus of claim 13, wherein the instructions are further executed by the processor to cause the apparatus to:

estimate a first effective channel for the first non-consecutive partial band based at least in part on a first set of RBs of the first resource subset; and

estimate a second effective channel for the second non-consecutive partial band based at least in part on a second set of RBs of the second resource subset, wherein the second non-consecutive partial band comprises a non-consecutive partial band from the first non-consecutive partial band that is non-consecutive in a frequency domain, time domain, or a combination thereof.

20. The apparatus of claim 19, wherein the instructions are further executed by the processor to cause the apparatus to:

select a channel state information resource indicator (CRI) based at least in part on the first and second effective channels, wherein the one or more channel state parameters are determined based at least in part on the CRI, and wherein the one or more channel state parameters comprise at least one of a precoding matrix indicator, a precoding type indicator, a rank indicator, a channel quality indicator, or a combination thereof.

21. The apparatus of claim 13, wherein the instructions are further executed by the processor to cause the apparatus to:

receive, from the base station, a control message indicating that the first partial band configuration and the second partial band configuration have different configuration parameters, wherein at least one configuration parameter of the first partial band configuration or the second partial band configuration is received in a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or in downlink control information (DCI).

22. The apparatus of claim 13, wherein the CSI-RS resource comprises one CSI-RS resource of the CSI-RS resource set.

23. The apparatus of claim 13, wherein:

at least two CSI-RS resources are different by at least a number of partial bands, a time duration for each partial band, a cycling granularity for each partial band, a number of CSI-RS ports for each partial band, precoder used for each partial band, or any combination thereof.

24. The apparatus of claim 13, wherein the instructions are further executed by the processor to cause the apparatus to:

receive, from the base station, a CSI-RS resource set configuration, wherein the CSI-RS resource set configuration comprises at least one of a number of CSI-RS resources of the CSI-RS resource set, a number of partial bands in each CSI-RS resource, a time duration for each partial band, a cycling granularity for each partial band, a number of CSI-RS ports for each partial band, or a combination thereof, and wherein the CSI-RS resource set configuration is included in a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or in downlink control information (DCI).

25. A non-transitory computer-readable medium storing code for wireless communication, the code comprising instructions executed by a processor to:

receive, from a base station, a first channel state information reference signal (CSI-RS) over a first resource subset of a CSI-RS resource associated with a first non-consecutive partial band, wherein the first CSI-RS is precoded according to a first partial band configuration;

receive a second CSI-RS over a second resource subset of the CSI-RS resource associated with a second non-consecutive partial band, wherein the second CSI-RS is precoded according to a second partial band configuration;

receive, from the base station, multiple CSI-RS resources from a CSI-RS resource set, wherein each CSI-RS resource is partitioned according to at least the first non-consecutive partial band and the second non-consecutive partial band;

determine, based at least in part on the first and second CSI-RSs, one or more channel state parameters based at least in part on the first non-consecutive partial band and the second non-consecutive partial band; and

transmit, to the base station, a feedback message that indicates the one or more channel state parameters.

26. The non-transitory computer-readable medium of claim 25, wherein the instructions to determine the one or more channel state parameters are executed by the processor to:

determine one or more channel state parameters for the CSI-RS resource corresponding to the first and second non-consecutive partial bands based at least in part on a channel estimation of the first and second non-consecutive partial bands.

27. The non-transitory computer-readable medium of claim 25, wherein the instructions are further executed by the processor to:

receive, from the base station, an indication of one or both of the first partial band configuration or the second partial band configuration, wherein the indication is received via a radio resource control (RRC) message, medium access control (MAC) channel element (CE), or downlink control information (DCI).

28. The non-transitory computer-readable medium of claim 25, wherein:

the first partial band configuration indicates at least one of the first resource subset, a first cycling granularity for the first non-consecutive partial band, a first time interval for the first CSI-RS, a first number of ports associated with transmission of the first CSI-RS, or a combination thereof; and

the second partial band configuration indicates at least one of the second resource subset, a second cycling granularity for the second non-consecutive partial band, a second time interval for the second CSI-RS, a second number of ports associated with transmission of the second CSI-RS, or a combination thereof.