CLAIMS

What is claimed is:

1. A channel measurement method, comprising:

receiving measurement configuration information from a network device, wherein the measurement configuration information is used to configure one or more measurement resource groups, each measurement resource group comprises X measurement resources, and X is an integer greater than 1;

performing joint channel measurement based on the measurement configuration information; and

sending a measurement result of the joint channel measurement to the network device, wherein the measurement result comprises X precoding matrix indicators (PMIs), X rank indicators (RIs), and one joint channel quality indicator (CQI) corresponding to one measurement resource group of the one or more measurement resource groups, wherein

the measurement resource is a channel resource; and

the measurement configuration information is further used to configure interference resource, and wherein

the interference resource comprises one or more channel state information interference measurement (CSI-IM) resources, one CSI-IM resource is associated with one measurement resource group, and the one CSI-IM resource has a same quasi-collocation (QCL) relationship with X measurement resources of the associated measurement resource group.

2. The method according to claim 1, wherein the measurement configuration information further indicates that the X measurement resources comprised in each measurement resource group are used for joint channel measurement.

3. The method according to any one of claims 1 to 2, wherein the performing joint channel measurement based on the measurement configuration information comprises:

determining a plurality of precoding matrices based on the X measurement resources comprised in each measurement resource group, wherein the X measurement resources are in one-to-one correspondence with the plurality of precoding matrices.

4. The method according to any one of claims 1 to 3, wherein the measurement configuration information further indicates that a joint measurement manner is determining a plurality of precoding matrices based on the X measurement resources comprised in each measurement resource group.

5. The method according to any one of claims 1 to 4, wherein the performing joint channel measurement based on the measurement configuration information comprises:

when measuring any resource in each measurement resource group, using another measurement resource as the interference measurement resource.

6. A channel measurement method, comprising:

sending measurement configuration information to a terminal device, wherein the measurement configuration information is used to configure one or more measurement resource groups, each measurement resource group comprises X measurement resources, and X is an integer greater than 1;

sending a reference signal according to the measurement configuration information; and

receiving a measurement result reported by the terminal device, wherein the measurement result comprises X precoding matrix indicators (PMIs), X rank indicators (RIs), and one joint channel quality indicator (CQI) corresponding to one measurement resource group of the one or more measurement resource groups, wherein

the measurement resource is a channel resource; and

the measurement configuration information is further used to configure interference resource, and wherein

the interference resource comprises one or more channel state information interference measurement (CSI-IM) resources, one CSI-IM resource is associated with one measurement resource group, and the one CSI-IM resource has a same quasi-collocation (QCL) relationship with X measurement resources of the associated measurement resource group.

7. The method according to claim 6, wherein the measurement configuration information further indicates that the X measurement resources comprised in each measurement resource group are used for joint channel measurement.

8. The method according to any one of claims 6 to 7, wherein the measurement configuration information further indicates that a joint measurement manner is determining a plurality of precoding matrices based on the plurality of measurement resources comprised in each measurement resource group.

9. A channel measurement apparatus, comprising:

a transceiver module, configured to receive measurement configuration information from a network device, wherein the measurement configuration information is used to configure one or more measurement resource groups, each measurement resource group comprises X measurement resources, and X is an integer greater than 1; and

a processing module, configured to perform joint channel measurement based on the measurement configuration information; wherein:

the transceiver module is further configured to send a measurement result of the joint channel measurement to the network device, wherein the measurement result comprises X precoding matrix indicators (PMIs), X rank indicators (RIs), and one joint channel quality indicator (CQI) corresponding to one measurement resource group of the one or more measurement resource groups,

wherein

the measurement resource is a channel resource; and

the measurement configuration information is further used to configure interference resource, and wherein

the interference resource comprises one or more channel state information interference measurement (CSI-IM) resources, one CSI-IM resource is associated with one measurement resource group, and the one CSI-IM resource has a same quasi-collocation (QCL) relationship with X measurement resources of the associated measurement resource group.

10. The apparatus according to claim 9, wherein the measurement configuration information further indicates that the X measurement resources comprised in each measurement resource group are used for joint channel measurement.

11. The apparatus according to any one of claims 9 to 10, wherein the processing module is specifically configured to:

determine a plurality of precoding matrices based on the X measurement resources comprised in each measurement resource group, wherein the X measurement resources are in one-to-one correspondence with the plurality of precoding matrices.

12. The apparatus according to any one of claims 9 to 11, wherein the measurement configuration information further indicates that a joint measurement manner is determining a plurality of precoding matrices based on the X measurement resources comprised in each measurement resource group.

13. The apparatus according to any one of claims 9 to 12, wherein when performing joint channel measurement based on the measurement configuration information, the processing module is configured to:

when measuring any resource in each measurement resource group, use another measurement resource as the interference measurement resource.

14. A channel measurement apparatus, comprising:

a sending module, configured to send measurement configuration information to a terminal device, wherein the measurement configuration information is used to configure one or more measurement resource groups, each measurement resource group comprises X measurement resources, and X is an integer greater than 1; and

send a reference signal according to the measurement configuration information;

a receiving module, configured to receive a measurement result reported by the terminal device, wherein the measurement result comprises X precoding matrix indicators (PMIs), X rank indicators (RIs), and one joint channel quality indicator (CQI) corresponding to one measurement resource group of the one or more measurement resource groups, wherein

the measurement resource is a channel resource; and

the measurement configuration information is further used to configure interference resource, and wherein

the interference resource comprises one or more channel state information interference measurement (CSI-IM) resources, one CSI-IM resource is associated with one measurement resource group, and the one CSI-IM resource has a same quasi-collocation (QCL) relationship with X measurement resources of the associated measurement resource group.

15. The apparatus according to claim 14, wherein the measurement configuration information further indicates that the X measurement resources comprised in each measurement resource group are used for joint channel measurement.

16. The apparatus according to any one of claims 14 to 15, wherein the measurement configuration information further indicates that a joint measurement manner is determining a plurality of precoding matrices based on the plurality of measurement resources comprised in each measurement resource group.

17. A communication apparatus, comprising a processor, configured to perform the method according to any one of claims 1-5.

18. A communication apparatus, comprising a processor, configured to perform the method according to any one of claims 6-8.

19. A computer-readable storage medium, wherein the computer-readable storage medium stores a program or instructions; and when the program or the instructions are read and executed by one or more processors, the method according to any one of claims 1 to 5 can be implemented; or when the program or the instructions are read and executed by one or more processors, the method according to any one of claims 6 to 8 can be implemented.

20. A computer program product, wherein when being read and executed by one or more processors, the computer program product can implement the method according to any one of claims 1 to 5; or when being read and executed by one or more processors, the computer program product can implement the method according to any one of claims 6 to 8.