

# Katie Bouman and the black hole picture

You will watch a short video in which Katie Bouman, one of the main scientists
responsible for the first picture of a black hole, talks about this scientific breakthrough.
Watch the <u>video</u> and write down the key ideas. Watch it a few times until you feel you
have grasped the general meaning. You can pause, rewind and listen again.

| Now read tl | he gapped  | transcript b        | elow. What                       | t parts or w                               | ords ha   | d you not und  | derstood?   |
|-------------|------------|---------------------|----------------------------------|--|---|--|---|
|             | Now read t | Now read the gapped | Now read the gapped transcript b | Now read the gapped transcript below. What | Now read the gapped transcript below. What parts or w | Now read the gapped transcript below. What parts or words ha | Now read the gapped transcript below. What parts or words had you not und |

| This is just        | the beginning of being able to have and            | other window into what black holes    |  |  |
|---------------------|--|---------------------------------------|--|--|
| can tell us about   | our laws and physics. But already we've learn      | ed so much. So you know               |  |  |
|                     | we had predicted that if we had a bl               | ack hole, that you would see this     |  |  |
| ring of light, we o | lidn't know we                                     | that ring of light, and               |  |  |
| that's you know,    | what we were kind of testing. We could've go       | ne in just a blob. And so seeing that |  |  |
| ring, and seeing a  | a ring that has a size that is consistent with oth | ner measurements that had been        |  |  |
| done completely     | differently I think that in itself,                | that ring of light,                   |  |  |
| being able to see   | that that ring exists is huge.                     |                                       |  |  |

3. Listen again and fill in the gaps in the transcript. You may need to listen a few times. If you cannot write down words, note down the sounds that you hear.

#### 4. Now read the full transcript and compare your answers:

This is just **like kind of** the beginning of being able to have another window into what black holes can tell us about our laws and physics. But already we've learned so much. So you know **even though** we had predicted that if we had a black hole, that you would see this ring of light, we didn't know **we were gonna (going to) get** that ring of light, and that's you know, what we were kind of testing. We could've gone in just a blob. And so seeing that ring, and seeing a ring that has a size that is consistent with other measurements that had been done completely differently... I think that in itself, **just being able to see** that ring of light, being able to see that that ring exists is huge.

What sort of words had you missed? Did they sound like you expected them to sound? Go to www.youglish.com and search for the word chunks (*like kind of, even though, we were going to get..*) to listen to how they are pronounced in natural speech.



# 5. Reflect on your listening. Complete the following reflective sheet<sup>1</sup>:

#### **Overall recognition**

- 1. Roughly how many of the words in the whole passage did you recognise
- a. the first time you listened to it? .....%
- b. after listening to it several times? .....%
- c. when listening with the help of the transcript? .....%

### Problems in recognising words

- 2. Using the transcript, write down some of the words that you
  - a) did not recognise at the beginning but recognised after listening several times.
  - b) did not recognise until you had the help of the transcript.
  - c) found difficult to recognise even when you had the transcript.
- 3. Now look at each of the words and try to say why you had difficulty in recognising it.
  - I did not recognise the sounds.
  - I got the syllables wrong.
  - The word was not said in a standard way.
  - The word was not easy to hear.
  - I confused it with another word.
  - Other reason:
- 4. Using the transcript, write some new words that you heard. What did you do when you heard each one?
  - I ignored it.
  - I guessed its meaning by comparing it to words in my own language.
  - I guessed its meaning by comparing it to other words I know in English.
  - I guessed its meaning from the words before and after. I misheard it as a similar word in English.
  - Other response

#### Problems in recognising grammar

- 5. Using the transcript, write down any groups of words that you did not recognise.
- 6. Now try to say why you did not recognise the structure.
  - I misunderstood or did not hear important words.
  - I did not notice inflections (-ed, -s, etc.).
  - I was misled by the word order.
  - I heard all the words but did not connect them to the grammar.
  - I was misled by the grammar of my own language.
  - I did not know the grammar.
  - Other reason:

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<sup>&</sup>lt;sup>1</sup> Reflective sheet adapted from *Listening in the language classroom* by John Field, 2008, Cambridge University Press.



## **Problems with meaning**

- 7. Using the transcript, write down groups of words where you recognised most of the words but did not understand the meaning.
- 8. Now try to say why you misunderstood.
  - There were problems with pronouns (it, her, him, this, etc.).
  - I had made a wrong guess earlier in the recording.
  - I was expecting the speaker to say something different.
  - I did not understand what topic the speaker was talking about.
  - I could not connect it to what I had heard before.
  - I did not understand the comprehension question.
  - I looked for the wrong key words from the question.
  - Other reason