

# Audio Quality Determination Based on Measurement Techniques\*

John G. Beerends,<sup>1</sup> James Joyce,<sup>2</sup> and Arthur Miller<sup>1,3</sup>

<sup>1</sup>*Royal PTT Netherlands N.V., The Netherlands, beerends@ptt.com.nl*

<sup>2</sup>*Trinity University, Ireland, jjoyce@dublin.ir*

<sup>3</sup>*Syracuse University, United States, arthurm@math.syracuse.edu*

This is the style template for the IWOLOCA 2023. Each submission should be at most two pages, giving clearly the research question of the talk. You may organize it into sections, include some figures or tables and references as follows.

## 1. Figures and Figure Captions

Please include all figures either in pdf, or in image formats as jpg, png, etc. Here are some examples of various kinds of figure captions that can be used with this style. They include the normal  $\LaTeX$  `\caption{}` as well as many more possibilities which you will see illustrated here.

The following example shows a regular caption.

Here is an example of a double caption; one figure with two<sup>2</sup> captions appearing side by side:

## 2. Making Tables

Notice that the caption should be at the top of the table. Use a line above the table, under the column heads, and at the end of the table. If you use the Kluwer command, `\spline` instead of the  $\LaTeX$  command `\hline`, you

---

\*Thanks to everyone...

<sup>2</sup>This is a sample footnote.

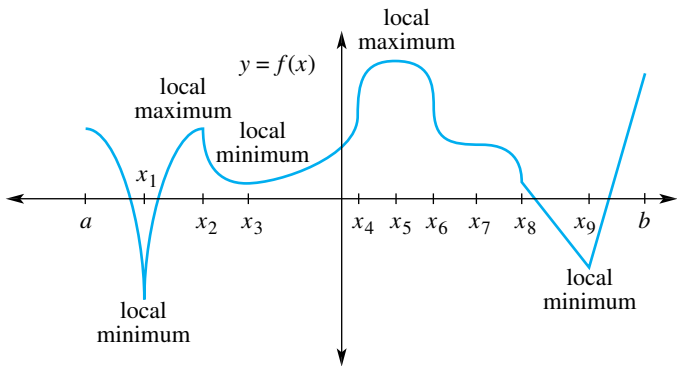


Figure 1. Oscillograph for memory address access operations, showing 500 ps address access time and  $\alpha\beta\Gamma\Delta\sum_{123}^{345}$  superimposed signals of address access in 1 kbit memory plane.

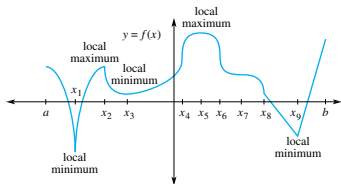


Figure 2. This caption will go on the left side of the page. It is the initial caption of two side-by-side captions.

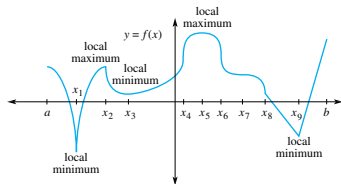


Figure 3. This caption will go on the right side of the page. It is the second of two side-by-side captions.

will get a little space added above and below the line, which will make your table look more elegant.

This form of the tabular command makes the table spread out to the width of the page.

Tables may use both the `\sidebyside` and the `\letteredcaption` command to position the tables side by side and letter the captions.

## References

[1] Anderson, Terry L., and Fred S. McChesney. (n.d.). "Raid or Trade? An Economic Model of Indian-White Relations," Political Economy Research Center Working Paper 93-1.

Table 1. Effects of the Two Types of Scaling Proposed by Dennard and Co-Workers.<sup>a,b</sup>

Parameter	$\kappa$ Scaling	$\kappa, \lambda$ Scaling
Dimension	$\kappa^{-1}$	$\lambda^{-1}$
Voltage	$\kappa^{-1}$	$\kappa^{-1}$
Currant	$\kappa^{-1}$	$\lambda/\kappa^2$
Dopant Concentration	$\kappa$	$\lambda^2/\kappa$

<sup>a</sup>Refs. 19 and 20.

<sup>b</sup> $\kappa, \lambda > 1$ .

Table 2a. A small table with a lettered table caption.

$\alpha\beta\Gamma\Delta$ One	Two	Three
one	two	three

Table 2b. A small table with a second lettered table caption.

$\alpha\beta\Gamma\Delta$ One	Two	Three
one	two	three
one	two	three

[2] Lacey, W.K. (1968). *History of Socialism*. Ithaca, NY: Cornell University Press.

[3] Oliva, Pavel. (1971). *Sparta and Her Social Problems*. Amsterdam: Adolf M. Hakkert.

[4] Zimmern, Alfred. (1961). *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens*, 5th ed. New York: Galaxy Book, Oxford University Press.

# Using BibTeX for a bibliography

## 1. Sample Bibliography Using BibTeX

If you would rather make a bibliography using BibTeX write,

```
\bibliographystyle{plain}  
\chapbbblname{chapbib}  
\chapbibibliography{logic}
```

and substitute the name of your .bib file for `logic` below. If you don't have `plain.bst` on your system, you can get it where you can find the book style files [1].

This will allow many BibTeX bibliographies in one book. This example shows the chapter bibliography using `\normallatexbib`.

## References

- [1] M. Abadi and L. Cardelli. A theory of primitive objects: Second-order systems. *Science of Computer Programming*, 25(2-3):81–116, December 1995. A preliminary version appeared in the 1994 Proc. of European Symposium on Programming.
- [2] K. Arnold and J. Gosling. *The Java Programming Language*. Addison Wesley, 1996.
- [3] L. Cardelli and X. Leroy. *Abstract types and the dot notation*, pages 479–504. IFIP State of the Art Reports. North Holland, March 1990. Also appeared as SRC Research Report 56.
- [4] W.R. Cook. *A Denotational Semantics of Inheritance*. PhD thesis, Brown University, 1989.

- [5] P. DiBlasio and K. Fisher. A concurrent object calculus. In *CONCUR '96 Proc.*, pages 655–670, Pisa, 1996. Springer LNCS 1119.
- [6] A. Goldberg and D. Robson. *Smalltalk–80: The Language and its Implementation*. Addison Wesley, 1983.
- [7] C.A. Gunter and J.C. Mitchell, editors. *Theoretical Aspects of Object-Oriented Programming*. MIT Press, Cambridge, MA, 1994.
- [8] B. Liskov et al. *CLU Reference Manual*. Springer LNCS 114, Berlin, 1981.
- [9] B. Liskov, A. Snyder, R. Atkinson, and C. Schaffert. Abstraction mechanisms in CLU. *Comm. ACM*, 20:564–576, 1977.
- [10] B. Meyer. *Eiffel: The Language*. Prentice-Hall, 1992.
- [11] R. Milner, M. Tofte, and R. Harper. *The Definition of Standard ML*. MIT Press, 1990.