

# L<sup>A</sup>T<sub>E</sub>X template for preparing a research article for submission to the *Journal of Optical Communications and Networking*

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## 1. INTRODUCTION

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## 3. EXAMPLES OF ARTICLE COMPONENTS

The sections below show examples of different article components.

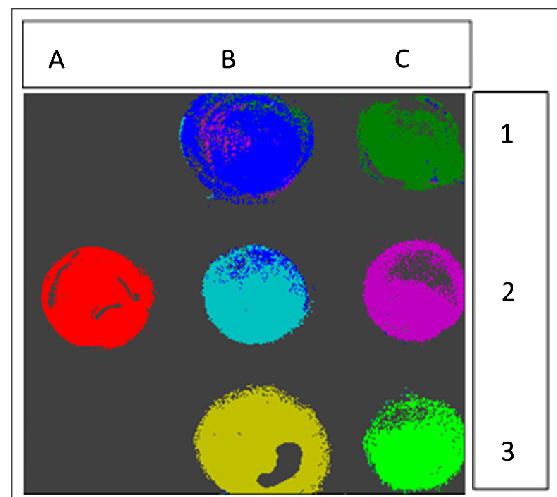
## 4. FIGURES AND TABLES

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Figures and Tables should be labelled and referenced in the standard way using the `\label{}` and `\ref{}` commands.

### A. Sample Figure

Figure 1 shows an example figure.



**Fig. 1.** False-color image, where each pixel is assigned to one of seven reference spectra.

### B. Author Photographs

Author photographs. The final printed size of an author photograph is exactly 1 inch wide by 1 1/4 inches long (6 picas  $\times$  7 1/2 picas). Please ensure that the author photographs you submit are proportioned similarly.

### C. Sample Table

Table 1 shows an example table.

**Table 1. Shape Functions for Quadratic Line Elements**

local node	$\{N\}_m$	$\{\Phi_i\}_m (i = x, y, z)$
$m = 1$	$L_1(2L_1 - 1)$	$\Phi_{i1}$
$m = 2$	$L_2(2L_2 - 1)$	$\Phi_{i2}$
$m = 3$	$L_3 = 4L_1L_2$	$\Phi_{i3}$

### 5. SAMPLE EQUATION

Let  $X_1, X_2, \dots, X_n$  be a sequence of independent and identically distributed random variables with  $E[X_i] = \mu$  and  $\text{Var}[X_i] = \sigma^2 < \infty$ , and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_{i=1}^n X_i \quad (1)$$

denote their mean. Then as  $n$  approaches infinity, the random variables  $\sqrt{n}(S_n - \mu)$  converge in distribution to a normal  $\mathcal{N}(0, \sigma^2)$ .

### 6. SAMPLE ALGORITHM

Algorithms can be included using the commands as shown in algorithm 1.

**Algorithm 1.** Euclid's algorithm

```

1: procedure EUCLID( $a, b$ )           ▷ The g.c.d. of  $a$  and  $b$ 
2:    $r \leftarrow a \bmod b$ 
3:   while  $r \neq 0$  do             ▷ We have the answer if  $r$  is 0
4:      $a \leftarrow b$ 
5:      $b \leftarrow r$ 
6:      $r \leftarrow a \bmod b$ 
7:   return  $b$                        ▷ The gcd is  $b$ 

```

### 7. SUPPLEMENTAL MATERIAL

Consult the Author Guidelines for Supplementary Materials in Optica's Journals for details on accepted types of materials and instructions on how to cite them. All materials must be associated with a figure, table, or equation or be referenced in the results section of the manuscript. (1) 2D and 3D image files and video must be labeled "Visualization," not "Movie," "Video," "Figure," etc. (2) Machine-readable data (for example, csv files) must be labeled "Data File." Number data files and visualizations consecutively, e.g., "Visualization 1, Visualization 2..." (3) Large datasets or code files must be placed in an open, archival database. Such items should be mentioned in the text as either "Dataset" or "Code," as appropriate, and also be cited in the references list. For example, "see Dataset 1 (Ref. [1]) and Code 1 (Ref [2])." Here are examples of the references:

#### A. Sample Dataset Citation

1. M. Partridge, "Spectra evolution during coating," figshare (2014) [retrieved 13 May 2015], <http://dx.doi.org/10.6084/m9.figshare.1004612>.

#### B. Sample Code Citation

2. C. Rivers, "Epipy: Python tools for epidemiology," (figshare, 2014) [retrieved 13 May 2015], <http://dx.doi.org/10.6084/m9.figshare.1005064>.

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### 9. REFERENCES

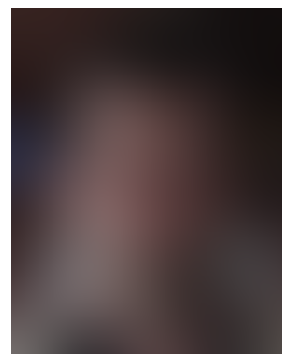
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Add citations manually or use BibTeX. See [1, 2].

#### REFERENCES

1. D. Chitimalla, K. Kondepu, L. Valcarengi, M. Tornatore, and B. Mukherjee, "5g fronthaul-latency and jitter studies of cpri over ethernet," *J. Opt. Commun. Netw.* **9**, 172–182 (2017).
2. Y.-H. Wen, J.-W. Ho, and K.-M. Feng, "Simultaneous all-optical transparent phase multiplexing/de-multiplexing based on fwm in a hnlf," in *Optical Fiber Communication Conference*, (Optica, 2022), p. W4D.1.

### AUTHOR BIOGRAPHIES



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**Alice Smith** received her BSc (Mathematics) in 2000 from The University of Maryland. Her research interests also include lasers and optics.