Mathematical Notation

Mathematical notation should be chosen so that the formulas and ideas presented in them are clear.

Variables. Authors should strive to use italic, one-letter variables. Various superscripts or subscripts (in normal font, i.e., not bold or italic) can be used for further identification. Try to avoid multi-letter and multi-word variables. However, if multi-word variables are necessary, connect them using an underscore between words rather than a space. For example, t^{ed} and t^{ea} will be the most math-friendly ways to denote variables "expected departure time" and "expected arrival time". Both quantities are times (not miles, or pounds), so *t* is appropriate and the superscript (in normal font) attaches adequate attributes to those times. Try to avoid *expected_departure* and *expected_arrival*, and especially beware of similar notations without underscores.

Greek variables. INFORMS style requires lowercase Greek letters to be italic, whereas uppercase and all bold Greek letters to be set normally (i.e., not italics). This is important for legibility, especially when such symbols are in subscripts where the small size impairs readability.

Equations. Please mark desired alignment in displays and set the equation numbers in parentheses flush right. Avoid huge braces meant to keep parts of a complex formula together and in such cases try to find an alternative way of presenting the math. Such big vertical chunks offer no column breakpoints and may make the page makeup difficult. Inline formulas (within a paragraph), if they are too clumsy, should be displayed instead. Try to avoid built-up fractions inside paragraphs by setting them in the solidus form, for example, "*a*/(1 - *b*)." Complicated exponents should be set using exp(…), both for clarity and for enabling breakpoints between lines. Because of the limited column width in INFORMS' two-column journals, long fractions sometimes may not fit, so we will use alternative ways to display them. For very complex displays, it is preferable to introduce auxiliary notation for main subformulas, set the main formula as simple as possible to convey the interrelation of parts, and then, in a "where" list, explain the temporary lengthy notation.

Acronyms and other notation issues. Make sure acronyms are clearly distinguished from namesake variables or program/problem labels. We suggest problem labels be denoted by square brackets around them (eg, [myMIP]), both at the statement of the problem and in text at its call-outs. Mathematical operators such as "sin", "log", or "Cov" should always be set roman. Pay particular attention to common but not predefined operators, such as supp, conv, ri, int, and sgn, keeping them in normal font. Try to use alternative ways for simplifying notation requiring multiple levels of sub- and superscripts. Keep the article properly structured, without arbitrary titles that cannot be identified as one of the common hierarchical elements, such as: section, subsection, subsubsection, paragraph (with title), enunciations (theorems, lemmas, remarks), or (description-) list labels.

Abstract. The article's abstract should be formula-free, unless that is not possible, in which case the use of formulas should be kept to the bare minimum. The abstract is used not only as an introduction into the article itself but also as metadata that are exchanged with a variety of portals, many of which are text only.

General requirements for LaTeX-produced manuscripts. For articles containing heavy math, we prefer submissions in LaTeX. Author styles and templates are available here. Please provide your contribution as one file, not as a set of sections.

Authors of *Interfaces* articles should avoid using formulas in the main body of the article and instead defer the mathematical setting of their exposition to the appendix.

Mathematics of Operations Research, Stochastic Systems, INFORMS Journal of Optimization, and *Service Science* are typeset in a single column, so authors are able to use long equations.