

## Fabio Furini <fabio.furini82@gmail.com>

## **ROADMAP QPLIB -- part 6 -- draft proposal**

Hans Mittelmann <mittelma@asu.edu> 13 luglio 2016 15:33 A: Fabio Furini <fabio.furini@dauphine.fr> Cc: Hans Mittelmann <mittelma@asu.edu> Dear Fabio, here is just a first list of corrections: page 1, end of abstract: final results look Introduction line 5: rooted in page 3 line 3: attempted, yet. page 5 line 8: (MI(QC)QP) looks terrible but MIQP often means linear constraints??? page 5 line 6 third paragraph: in particular in the form of binary variables could always be "hidden" by introducing (non convex) quadratic constraints utilizing the celebrated relationship... page 6 line 4-6 of third paragraph: contained in page 6 line -4: only requires page 7 line 1 of second paragraph: It is important to note page 7 line -9: be distinguished from page 8 line 4: did not include a "D" option page 8 line 15: those that can be page 8 line 21: and those that are page 8 line -13: are available that are able to page 8 line -10: focussed on (focused on) page 8 line -4: being equal, substantially page 9 line 6: need to distinguish page 9 line 11: even in the presence of page 9 line 15: among which is the reformulation page 9 line 21: is the most general page 9 line -11: subdivided into page 9 line -9; significant (scratch one) page 9 line -9: and therefore can be of interest to researchers page 9 line -4: structures that may be of interest to some researcher page 9 line -2: we do not attempt .....and limit ourselves to page 10 line 5 second paragraph: even when one exists page 10 line 2 third paragraph: meta-heuristic methods page 11 line 4: possibly via devices that page 11 line 2 second paragraph: The (k+1)-st iterate page 11 second paragraph: There are more general methods with non monotone descent etc; maybe say: in general... page 11 paragraph on Active set methods: They typically do not work with A but with a working set W which is a subset of page 13 line 2 third paragraph: on whether the local search they utilize page 13 line -8: calling exact a solver that employs page 13 line -4: shall loosen the page 14 line 2: this tree is NOT called "decision tree" as far as I know page 14 line 9: children of the current one page 14 line 5 of third paragraph: bounds improves page 14: MOSEK has CGC capabilities, so should be listed there; but there are others such a minlp bb, minotaur. filming page 14: there is no KNITRO\_BB. it is just KNITRO. When integer variables are present it automatically employs BB page 15: a number of errors in Table 1, for example: the following are not exact for non convex problems alphaECP, DICOPT, SBB, LGO page 16 line 5 of 3.1: both in academia page 16 line -6: eight thousand page 17 line 1 of 3.2: no specific formats were page 17 line 3 of 3.2: to use GAMS as

page 17 line -2: to translate an instance from a given format to the .gms format

page 18 line 1 of text: a specific format .qplib

page 18 line 1 of 3.3: the following features have been

page 18 line —8: Continuous and Quadratic

cheers, Hans

Begin forwarded message:

From: Fabio Furini <fabio.furini@dauphine.fr>

Subject: ROADMAP QPLIB -- part 6 -- draft proposal

**Date:** July 12, 2016 at 1:16:35 PM GMT+2

To: Hans Mittelmann <mittelma@asu.edu>, Antonio Frangioni <frangio@di.unipi.it>, Fabio Furini <fabio.furini@dauphine.fr>, Leo Liberti <leoliberti@gmail.com>, Sahinidis <niksah@gmail.com>, Nick Gould <nick.gould@stfc.ac.uk>, "angelika.wiegele@aau.at" <angelika.wiegele@aau.at>, Pierre Bonami <pierre.bonami@lif.univ-mrs.fr>, "Misener, Ruth" <r.misener@imperial.ac.uk>, "Belotti, Pietro Luigi" <pietrobelotti@fico.com>, Alper Atamturk <atamturk@berkeley.edu>, FRoupin <roupin@lipn.univ-paris13.fr>, Sam Burer <samuel-burer@uiowa.edu>, "<sourour.elloumi@ensiie.fr>" <sourour.elloumi@ensiie.fr>, Hans Mittelmann <mittelmann@asu.edu>, Pierre Bonami <pierre.bonami@es.ibm.com>, Andrea Lodi <andrea.lodi@unibo.it>, Emiliano Traversi <emiliano.traversi@gmail.com>, Ambros Gleixner <gleixner@zib.de>, Andrea Lodi <andrea.lodi@polymtl.ca>, Stefan Vigerske <svigerske@gams.com>
[Testo tra virgolette nascosto]

