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Description:

From 1999 the Department of Computer Science in Trinity College Dublin was involved in Grid computing. From 2001 it was a non-funded participant in the EU DataGrid project (led by CERN) and a funded participant its successors, and from 2002 was a participant in the EU CrossGrid project (led by CYFRONET) and its successors. This item presents the proceedings of a 2007 workshop on Grid computing organised by CYFRONET in Cracow, Poland. See elsewhere in this catalog for literature and hardware for the world wide computing Grid.

Many thanks to Brian Coghlan for donating this item.

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Some of the items below are more properly part of the other categories of this catalog,
but are listed here for convenience.

Accession Index	Object with Identification
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TCD-SCSS-V.20190910.002	Ed: Grigoras, D., Nicolau, A., Toursel, B., Folliot, B., Advanced Environments, Tools, and Applications for Cluster Computing, Proc.Nato Advanced Research Workshop, IWCC 2001, Mangala, Romania, Sep-2001, ISBN 3-540-43672-3, LNCS-2326, Springer, 2002.
TCD-SCSS-V.20190910.003	Ed: Rivera, F.F., Bubak, M., Tato, A.G., Doallo, R., Grid Computing, Proc.1st European AcrossGrids Conference, Santiago de Compostelo, Spain, Feb-2003, ISBN 3-540-21048-2, LNCS-2970, Springer, 2004.
TCD-SCSS-V.20190910.004	Ed: Sloot, P.M.A., Hoekstra, A.G., Priol, T., Reinefeld, A., Bubak, M., Advances in Grid Computing, Proc.European Grid Conference, Amsterdam, The Netherlands, Feb-2005, ISBN 3-540-26918-5, LNCS-3470, Springer, 2005.
TCD-SCSS-V.20190910.005	Ed: Bubak, M., Noga, M., Turala, M., Proc.Cracow '02 Grid Workshop, proceedings of workshop in Cracow, Poland, Dec-2002, ISBN 83-915141-0-2, CYFRONET, 2003.
TCD-SCSS-V.20190910.006	Ed: Bubak, M., Noga, M., Turala, M., Proc.Cracow '03 Grid Workshop, proceedings of workshop in Cracow, Poland, Dec-2003, ISBN 83-915141-3-7, CYFRONET, 2004.
TCD-SCSS-V.20190910.007	Ed: Bubak, M., Turala, M., Wiatr, K., Proc.Cracow '04 Grid Workshop, proceedings of workshop in Cracow, Poland, Dec-2004, ISBN 83-915141-4-5, CYFRONET, 2005.
TCD-SCSS-V.20190910.008	Ed: Bubak, M., Turala, M., Wiatr, K., Proc.Cracow '05 Grid Workshop, proceedings of workshop in Cracow, Poland, Nov-2005, ISBN 83-915141-5-3, CYFRONET, 2006.
TCD-SCSS-V.20190910.009	Ed: Bubak, M., Turala, M., Wiatr, K., Proc.Cracow '06 Grid Workshop, proceedings of workshop in Cracow, Poland, Dec-2006, Vol.1 ISBN 978-83-915141-7-X, Vol.2 ISBN 978-83-915141-8-4, CYFRONET.
TCD-SCSS-V.20190910.011	Ed: Bubak, M., Turala, M., Wiatr, K., Proc.Cracow '08 Grid Workshop, proceedings of workshop in Cracow, Poland, Oct-2008, ISBN 978-83-61433-00-2, CYFRONET, 2009.
TCD-SCSS-V.20190910.012	Ed: Bubak, M., Turala, M., Wiatr, K., Proc.Cracow '09 Grid Workshop, proceedings of workshop in Cracow, Poland, Oct-2009, ISBN 978-83-61433-01-9, CYFRONET, 2010.

References:

1. Wikipedia, *Grid computing*, see:
https://en.wikipedia.org/wiki/Grid_computing
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Cracow '07 Grid Workshop

October 15 – 17, 2007
Cracow, Poland



Proceedings

Editors: Marian Bubak
Michał Turafa
Kazimierz Wiatr

Figure 1: Proc.Cracow '07 Grid Workshop, Front Cover

Cracow '07 Grid Workshop

October 15 – 17, 2007
Cracow, Poland



Proceedings

Editors: Marian Bubak
Michał Turata
Kazimierz Wiatr

Figure 2: Proc.Cracow '07 Grid Workshop, Title Pages page 1

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