

Workshop ICT

Report of Contributions

Contribution ID: 0

Type: **not specified**

Saluti e presentazione Workshop

Tuesday, September 16, 2014 9:00 AM (30 minutes)

Primary author: SMAREGLIA, Riccardo

Presenter: SMAREGLIA, Riccardo

Contribution ID: 1

Type: **not specified**

software@INAF

Tuesday, September 16, 2014 9:30 AM (30 minutes)

Primary author: GARILLI, Bianca

Presenter: GARILLI, Bianca

Contribution ID: 2

Type: **not specified**

Sviluppi dell'infrastruttura informatica e dei servizi INAF

Tuesday, September 16, 2014 10:00 AM (30 minutes)

Primary author: MAURO, Nanni

Presenter: MAURO, Nanni

Contribution ID: 3

Type: **not specified**

Presente e futuro della rete Garr

Wednesday, September 17, 2014 3:00 PM (30 minutes)

Primary author: CARBONI (GARR), Massimo (GARR)

Presenter: CARBONI (GARR), Massimo (GARR)

Contribution ID: 4

Type: **not specified**

Gestione documentale e digitalizzazione: aspetti generali e stato dell'arte in Inaf

Wednesday, September 17, 2014 4:50 PM (30 minutes)

Primary author: FLORA, laura

Presenter: FLORA, Laura

Contribution ID: 5

Type: **not specified**

IDEM/Edu-Roam e Servizi di autenticazione

Tuesday, September 16, 2014 11:00 AM (30 minutes)

Primary author: TINARELLI, Franco

Presenter: TINARELLI, Franco

Contribution ID: 6

Type: **not specified**

Presentazione CRIS-INAF

Tuesday, September 16, 2014 11:30 AM (30 minutes)

Primary author: KONOMI, ervin

Presenter: KONOMI, Ervin

Contribution ID: 7

Type: **not specified**

Una esperienza di virtualizzazione dei servizi

Tuesday, September 16, 2014 12:00 PM (30 minutes)

: La virtualizzazione dei PC dell' amministrazione e dei Servizi. Problematiche e Goal di un percorso legato all'alleggerimento dell' IT managemet amministrativo che permette una maggiore e veloce interazione con l'utente.

Primary author: GATTI, michele

Presenter: GATTI, Michele

Contribution ID: 8

Type: **not specified**

Sicurezza in rete 1/2

Tuesday, September 16, 2014 2:30 PM (1h 30m)

Formazione

Primary author: VENUTI (GARR), Simona (GARR-Cert)

Presenter: VENUTI (GARR), Simona (GARR-Cert)

Contribution ID: 9

Type: **not specified**

Sicurezza in rete (2/2)

Tuesday, September 16, 2014 4:30 PM (2 hours)

Formazione

Primary author: VENUTI (GARR), Simona (GARR-Cert)

Presenter: VENUTI (GARR), Simona (GARR-Cert)

Contribution ID: **10**

Type: **not specified**

Reti IPv6 (1/2)

Wednesday, September 17, 2014 9:00 AM (1h 30m)

Primary author: TINARELLI, Franco

Presenter: TINARELLI, Franco

Contribution ID: 11

Type: **not specified**

Reti IPv6 (2/2)

Wednesday, September 17, 2014 11:00 AM (2 hours)

Primary author: TINARELLI, Franco

Presenter: TINARELLI, Franco

Contribution ID: 12

Type: **not specified**

Indagine sul calcolo INAF

Wednesday, September 17, 2014 2:30 PM (30 minutes)

Primary author: BECCIANI, Ugo

Presenter: TAFFONI, Giuliano

Contribution ID: 13

Type: **not specified**

Presentazione CINECA

Wednesday, September 17, 2014 4:00 PM (30 minutes)

Primary author: ERBACCI, Giovanni (CINECA)

Presenter: ERBACCI, Giovanni (CINECA)

Contribution ID: 14

Type: **not specified**

Presentazione CRS4

Wednesday, September 17, 2014 3:30 PM (30 minutes)

Primary author: LEONI, Lidia (CRSA)

Presenter: LEONI, Lidia (CRSA)

Contribution ID: 15

Type: **not specified**

Tavola Rotonda: La gestione degli incidenti di sicurezza

Wednesday, September 17, 2014 5:20 PM (1h 35m)

Primary author: NANNI, Mauro

Presenter: NANNI, Mauro

Contribution ID: 16

Type: **not specified**

Uso di tecniche HPC nella determinazione dei parametri Astrometrici di stelle primarie nella Missione Gaia

Wednesday, September 17, 2014 4:50 PM (25 minutes)

Gaia è una fondamentale missione ESA. Il satellite è stato lanciato alla fine del 2013 . L'obiettivo principale della missione consiste nella preparazione di un catalogo astrometrico con precisione del micro-secondo d'arco di circa 1 miliardo di stelle della nostra galassia. Il lavoro presentato è focalizzato sulla ricerca della soluzione di un sistema costituito da fino a 72 miliardi di equazioni lineari con 600 milioni di incognite in una matrice sparsa. Sono presentati il codice parallelo e i risultati ottenuti su IBM BlueGeneQ al Cineca. Per tale task INAF e il Cineca hanno sottoscritto un MoU per l'uso delle risorse Cineca per la missione Gaia

Primary author: BECCIANI, ugo

Presenter: BANDIERAMONTE, Marilena

Contribution ID: 17

Type: **not specified**

HPC projects in Astrophysics at INAF/OAPa: current challenges and future perspectives

Wednesday, September 17, 2014 5:15 PM (25 minutes)

Primary author: ORLANDO, Salvatore

Presenter: ORLANDO, Salvatore

Contribution ID: 18

Type: **not specified**

Simulating the cradle of stars with graphics processing units

Wednesday, September 17, 2014 5:40 PM (25 minutes)

Simulating young star clusters is a challenge for computational astrophysics. Three main aspects must be accounted for: (i) the hydro-dynamics of the parent molecular cloud, (ii) the dynamics of the newly formed stars, and (iii) the evolution of stars and binary systems.

The hydro-dynamical treatment of the gas is particularly demanding because it requires both very high resolution and a suitable cooling function. Given the high density that can be reached in the core of dense young star clusters, the stellar component requires direct-summation N-body integrators, coupled with up-to-date recipes for stellar evolution and stellar winds.

Our new group at the Observatory of Padova is involved in the most innovative simulations of molecular clouds and young star clusters. We make use of special purpose hardware, especially graphics processing units (GPUs), to meet the challenge of coupling collisional stellar dynamics and stellar evolution. In this talk, I will present our new tool for stellar evolution in direct-summation N-body codes, which is based on the new Padova stellar evolution tracks. I will also discuss some of our most recent results about star cluster formation and evolution, in the frame of our FIRB 2012 project, and of our most recent CINECA projects.

Primary author: MAPELLI, Michela

Presenter: MAPELLI, Michela

Contribution ID: 19

Type: **not specified**

Attività di HPC presso INAF - OATo: simulazioni MHD di plasmi astrofisici

Wednesday, September 17, 2014 6:05 PM (25 minutes)

Primary author: ZANNI, Claudio

Presenter: ZANNI, Claudio

Contribution ID: 20

Type: **not specified**

Simulations of cosmic structures: a challenge for coding and HPC architectures

Wednesday, September 17, 2014 6:30 PM (25 minutes)

I will describe the kind of cosmological simulations performed by our hpc group in Trieste, ranging from galaxies to galaxy clusters to cosmological volumes. I will briefly discuss our main simulation code, and its future planned development. In this context, I will also discuss our needs, and our wishes, in terms of hardware and hardware architectures.

Primary author: MURANTE, Giuseppe

Presenter: MURANTE, Giuseppe

Contribution ID: 21

Type: **not specified**

DELL

Thursday, September 18, 2014 9:00 AM (30 minutes)

Primary author: BIANCO, paolo

Presenter: BIANCO, paolo

Contribution ID: 22

Type: **not specified**

HPC and BigData solutions in research: the IBM vision

Thursday, September 18, 2014 9:30 AM (30 minutes)

Primary author: BRISCOLINI, Marco

Presenter: BRISCOLINI, Marco

Contribution ID: 23

Type: **not specified**

Oracle & "La Macchina delle Stelle"

Thursday, September 18, 2014 10:00 AM (30 minutes)

How Oracle can help in providing a structured, consolidated system for the INAF knowledge sharing

Primary author: CAUDERA, Ezio (Oracle Italia)

Presenter: CAUDERA, Ezio (Oracle Italia)

Contribution ID: 24

Type: **not specified**

La Commissione Calcolo e Reti nell'INFN. Cos'è, come funziona e che ruoli ha.

Thursday, September 18, 2014 11:00 AM (30 minutes)

Presenter: MENASCE, Dario

Contribution ID: 25

Type: **not specified**

Grid and Cloud Computing at INFN

Thursday, September 18, 2014 11:30 AM (30 minutes)

Presenter: SALOMONI, Davide

Contribution ID: 26

Type: **not specified**

Archivi astronomici In Italia - IA2 e varie

Thursday, September 18, 2014 12:00 PM (25 minutes)

Presenter: SMAREGLIA, Riccardo

Contribution ID: 27

Type: **not specified**

DHTCS @ INAF

Thursday, September 18, 2014 12:25 PM (20 minutes)

Primary author: PASIAN, fabio

Presenter: TAFFONI, Giuliano

Contribution ID: 28

Type: **not specified**

Euclid

Thursday, September 18, 2014 12:45 PM (20 minutes)

Presenter: PASIAN, Fabio

Contribution ID: 29

Type: **not specified**

GAIA: "prototipo metodologico" per le missioni spaziali del futuro

Thursday, September 18, 2014 2:30 PM (25 minutes)

Primary author: LATTANZI, Mario

Presenter: LATTANZI, Mario

Contribution ID: **30**

Type: **not specified**

3D visual analytics systems for ViaLactea project

Thursday, September 18, 2014 2:55 PM (20 minutes)

Primary author: VITELLO, Fabio

Presenter: VITELLO, Fabio

Contribution ID: 31

Type: **not specified**

The control software of the Sardinia Radio Telescope

Thursday, September 18, 2014 3:15 PM (25 minutes)

During this presentation we address the past, present and future of Nuraghe, the control software designed for the Sardinia Radio Telescope.

We provide an overview on the requirements, the problems which were faced and the design solutions adopted along the years.

The current status, with the SRT astronomical validation in execution, and our development plan are also described.

Presenter: ORLATI, Andrea

Contribution ID: 32

Type: **not specified**

ACID - Astro & Physics Cloud Interactive Desktop

Thursday, September 18, 2014 3:40 PM (20 minutes)

The Astronomical & Physics Cloud Interactive Desktop (ACID) has been developed for the prototype of CTA Science Gateway in Catania, Italy. ACID is based on a web environment that, avoiding any installation on a local PC, allows the use of plenty of software packages for both on-line and off-line analysis of astrophysical data. The users are able to exploit, if applicable, the native Graphical User Interface (GUI) of the tools available in the ACID environment. The ACID environment exploited by the Science Gateway offers two modes of usage: interactively to perform an on-line analysis through the VNC desktop and the native GUIs or shell environment of the programs; Distributed Computing Infrastructure (DCI) to perform an off-line analysis through a workflow submission. For the interactive usage of the remote software, ACID exploits an ad hoc VNC-based User Interface (VUI). Each type of analysis can be exploited through the CTA Science Gateway based on Liferay and WS-PGRADE/gUSE. Data file sharing is ensured by ownCloud technology. All of these functionalities can be also used through iOS and Android devices.

Presenter: MASSIMINO, Piero

Contribution ID: 33

Type: **not specified**

Infrastrutture Hardware e Software del centro dati VST

Thursday, September 18, 2014 4:30 PM (20 minutes)

Il VLT Survey Telescope e' un telescopio con uno specchio primario da 2.6 m, caratterizzato da un campo di vista di 1 grado quadrato ed una risoluzione di 0.21 arcsec/pixel che e' operativo dal settembre 2011 sul Cerro Paranal. Per supportare la comunita' scientifica dell'INAF che fa uso dei dati VST e' stato realizzato presso l'Osservatorio Astronomico di Capodimonte il centro dati VSTceN. Attualmente esso fornisce immagini completamente calibrate e pronte per essere sfruttate scientificamente a 10 survey che sfruttano il tempo garantito INAF, OmegaCam ed il tempo garantito cileno. Verranno mostrate le infrastrutture HW, la pipeline, denominata VST-Tube, sviluppata per processare le immagini del VST insieme ai primi risultati scientifici.

Primary author: GRADO, Aniello

Presenter: GRADO, Aniello

Contribution ID: 34

Type: **not specified**

Pipeline fotometriche per la gestione dei dati di imaging da LBT per la partnership italiana

Thursday, September 18, 2014 4:50 PM (20 minutes)

Presenter: TESTA, Vincenzo

Contribution ID: 35

Type: **not specified**

Sistemi integrati per la gestione di dati spettroscopici: LBT, VIPERS, VANDELS

Thursday, September 18, 2014 5:10 PM (20 minutes)

Presenter: FRANZETTI, Paolo

Contribution ID: 36

Type: **not specified**

GAIA: Dal Tera al Peta il "social network" nella Galassia

Thursday, September 18, 2014 5:30 PM (20 minutes)

Presenter: MORBIDELLI, Roberto

Contribution ID: 37

Type: **not specified**

The Serra La Nave ICT equipment of the ASTRI SST-2M telescope prototype for the Cherenkov Telescope Array

Thursday, September 18, 2014 6:10 PM (20 minutes)

: ASTRI is an Italian flagship project whose first goal is the realization of an end-to-end telescope prototype, named ASTRI SST-2M, for the Cherenkov Telescope Array (CTA). The prototype will be installed in Italy during Fall 2014. A second goal will be the realization of the ASTRI/CTA mini-array which will be composed of seven SST-2M telescopes placed at the CTA Southern Site. The Information and Communication Technology (ICT) equipment necessary to drive the infrastructure for the ASTRI SST-2M prototype is being designed as a complete and stand-alone computer centre. The design goal is to obtain a basic ICT equipment that might be scaled, with a low level of redundancy, for the ASTRI/CTA mini-array, taking into account the necessary control, monitor and alarm system requirements. The ICT equipment envisaged at the Serra La Nave (SLN) observing station in Italy, where the ASTRI SST-2M telescope prototype will operate, includes computers servers and workstations, network devices, an uninterruptable power supply system, and air conditioning systems. This talk presents the proposed general schema of the SLN Computer Centre and Control Room, describing in particular the Local Area Network (LAN) schema, the computing and storage system, and the system for the telescope control. In particular will be shown HW and SW solutions already implemented, giving particular emphasis to the control system and remote monitoring.

Presenter: GIANNOTTI, Fulvio

Contribution ID: 38

Type: **not specified**

An Innovative Proposal for the CTA Science Gateway

Thursday, September 18, 2014 5:50 PM (20 minutes)

This CTA science gateway prototype presents a graphical user interface based on a workflow-oriented framework (gUSE/WS-PGRADE). It is equipped with a flexible SSO (SAML based) Authentication and Authorization access control. An interactive desktop environment: the Astronomical & Physics Cloud Interactive Desktop (ACID) is available through the science gateway. The user will be able to exploit the native graphical interface of the tools provided by the ACID environment. A cloud data service shares and synchronizes data files and output results between the user desktop and the science gateway.

Primary author: COSTA, Alessandro

Presenter: MASSIMINO, Pietro

Contribution ID: 39

Type: **not specified**

Sistema di controllo e supervisione con il framework Alma Common Software (ACS)

Friday, September 19, 2014 9:00 AM (20 minutes)

Primary author: POPPI, Sergio

Presenter: POPPI, Sergio

Contribution ID: 40

Type: **not specified**

Data post-processing with CASA package

Friday, September 19, 2014 9:20 AM (20 minutes)

An overview of the deployment of Common Astronomy Software Applications package at the italian ALMA Regional Center.

Primary author: BEDOSTI, Francesco

Presenter: BEDOSTI, Francesco

Contribution ID: 41

Type: **not specified**

Correlazione VLBI con software DiFX

Friday, September 19, 2014 9:40 AM (20 minutes)

A oltre un anno dall'installazione del software di correlazione DiFX verranno illustrate problematiche, casi ed elementi di gestione e trattamento dei dati radioastronomici e geodinamici degli esperimenti effettuati coinvolgendo le antenne italiane di Medicina, Noto, Matera e SRT.

Primary author: STAGNI, Matteo

Presenter: STAGNI, Matteo

Contribution ID: 42

Type: **not specified**

Digital Backend in Radio-Astronomy

Friday, September 19, 2014 10:00 AM (20 minutes)

Primary author: MELIS, Andrea

Presenter: MELIS, Andrea

Contribution ID: 43

Type: **not specified**

Nuove Potenzialita' Osservative Dei Radiotelescopi IRA

Friday, September 19, 2014 10:20 AM (20 minutes)

Negli ultimi anni i radiotelescopi dell'Istituto di Radioastronomia hanno visto un major upgrade del sistema osservativo, che ne ha migliorato le prestazioni di circa tre ordini di grandezza in termini di sensibilità osservativa single-dish.

Per sfruttare appieno queste nuove potenzialità i radiotelescopi si stanno dotando di moderni strumenti software dedicati alle varie fasi osservative, (preparazione delle osservazioni, ispezione, elaborazione e analisi dei dati). E' inoltre in costruzione un moderno archivio dati consultabile via web.

In questo talk presentiamo i recenti sviluppi software, le collaborazioni nazionali e internazionali nel cui ambito essi sono stati realizzati, nonché le attività future.

Primary author: RIGHINI, Simona

Presenter: RIGHINI, Simona

Contribution ID: 44

Type: **not specified**

Realizzare infrastrutture da zero: opportunita' e problemi

Tuesday, September 16, 2014 12:30 PM (30 minutes)

Primary author: IGNAZIO, Porceddu (OA Cagliari)

Presenter: IGNAZIO, Porceddu (OA Cagliari)

Contribution ID: 45

Type: **not specified**

Saluti Direttore OA Cagliari

Wednesday, September 17, 2014 2:15 PM (15 minutes)

Primary author: POSSENTI, Andrea

Presenter: POSSENTI, Andrea