

Report from The Fifth Annual Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net 2006)

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1 Conference

MedHocNet 2006 was an international workshop for researchers, from academia, research labs and industry, to present results, discuss new ideas, as well as interacting with colleagues in the field of wireless multihop networking. Several nationalities were represented on the conference e.g. Europe, Asia, USA.

On the first day, not included in the conference, a full day tutorial was held by Professor Ian F. Akyildiz (Georgia Institute of Technology) on *Wireless Sensor Networks*. The tutorial was very fruitful for the knowledge of wireless sensor networks. The conference also included a panel discussion about *Dependable Coordination in Ad Hoc Networks*.

On the second day of the conference there was a conference dinner at the best restaurant on Lipari. We had two different antipasti dishes, one main course and dessert, wine was also served.

I went to this conference together with my college to present a paper, *Energy-Efficient Cluster Formation for Large Sensor Networks using a Minimum Separation Distance*, and I was also a co-author of a poster, that my college presented.

In this paper we investigate the usefulness of enforcing a minimum separation distance between cluster heads in a cluster based sensor network. We performed initial simulations in order to determine how much we can lower the energy consumption in the sensor network by separating the cluster heads. We also investigated how the number of clusters affect the energy consumption for a given minimum separation distance. The results show that our sensor network performs up to 150% better when introducing a minimum separation distance between cluster heads, comparing the number of messages received at the base station. The simulations also show that the minimum separation distance resulting in the lowest energy consumption in our network varies with the number of clusters.

2 Venue



Figure 1a: Hotel Tritone



Figure 1b: The view from Hotel Tritone

The MedHocNet workshop was held on the wonderful island Lipari. Lipari is the largest of the Aeolian Islands, a group of seven small islands a few miles from the Sicilian coast. Lipari is also one of the most famous touristic resorts in Sicily. To reach Lipari we had to take the train all the way to Milazzo port, to catch the speedboat to Lipari. Since the flight, train/bus and boat timetables did not mach each other we had to spend one night in Catania both on the way to Lipari and on the way back to Sweden. On the way to Italy my luggage got lost i Milano, the *black hole* according to some Italian people on the conference. I got my luggage on the second day of our stay.

The conference took place at hotel tritone, Figure 1a, located on the hill only a short distance from both the sea and the city center. The view from the hotel was amazing, Figure 1b. One afternoon we went on a boat trip to Stromboli. Stromboli is also one of the Aeolian Islands and is one of the most active volcanoes on earth. It has been in nearly continuous eruption for about 2000 years. The trip to Stromboli, to see the eruptions is something that I would really recommend. In Figure 2a there is some smoke coming from the volcano, later in the evening we could also see when lava was thrown out from the top. It was just amazing!!



Figure 2a: Stroboli Island

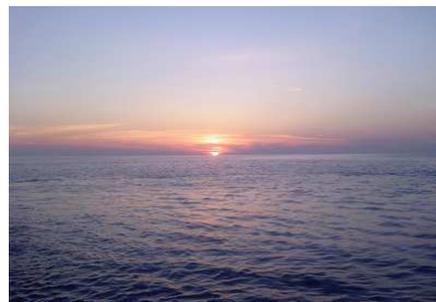


Figure 2b: Sunset